Upper Red River Basin Report
Upper Washita River Basin Report

LEGAL REVIEW OF WATER RIGHTS AND ADAPTATION STRATEGIES: ISSUES, CONSTRAINTS AND OPTIONS

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This legal review does not represent the official position or opinion of the United States Bureau of Reclamation (Reclamation), the Oklahoma Water Resources Board (OWRB), or the Master Conservancy Districts of Foss Reservoir, Fort Cobb Reservoir, Mountain Park (Tom Steed) Reservoir, or the Lugert-Altus Irrigation District (Districts).

Drew L. Kershen prepared this legal review under Agreement Number R17AP00090 between the United States Bureau of Reclamation and the Board of Regents of the University of Oklahoma. Drew L. Kershen prepared this legal review in compliance with a Scope of Work dated August 4, 2017.

While Reclamation, OWRB and the Districts are study partners for this legal review, Drew L. Kershen is solely responsible for the contents, interpretations and opinions presented in this legal review. This legal review is an academic research study and is not legal advice. Kershen is an academic researcher and does not have an attorney-client relationship with any of the study partners.

Information for Readers

This legal review exists primarily as a PDF document that the Bureau of Reclamation (Reclamation) posted as one component of its Upper Red River Basin Study and its Upper Washita River Study. The URL where this legal review exists is as follows: https://www.usbr.gov/gp/otao/westokbasinstudies_academiclegalreview.pdf

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Reclamation also made twenty print copies of this Legal Review. Printed copies exist in the Reclamation archives in Austin, TX and Oklahoma City, OK, at the Oklahoma Water Resources Board (OWRB), and at the four Districts (Lugert-Altus Irrigation District, Mountain Park Master Conservancy District, Fort Cobb Reservoir Master Conservancy District, and Foss Reservoir Master Conservancy District). The Law Libraries of the University of Oklahoma College of Law, Oklahoma City University Law School, and the University of Tulsa College of Law also each received a printed copy of this Legal Review.

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CHAPTER ONE: INTRODUCTION, OBJECTIVES AND GOALS

INTRODUCTION

The United States Bureau of Reclamation (Reclamation), the Oklahoma Water Resources Board (OWRB), the Foss Reservoir Master Conservancy District (Foss RMCD), the Fort Cobb Reservoir Master Conservancy District (Fort Cobb RMCD), the Lugert-Altus Irrigation District (LAID), and the Mountain Park Master Conservancy District (MPMCD) have entered into memoranda of agreement to study the water supply and water availability for the four western-most Reclamation reservoirs in Oklahoma: Foss, Fort Cobb, W.C. Austin, and Tom Steed.[1] These five study partners decided to undertake this study in light of the extreme drought that afflicted Western Oklahoma from 2010 through 2015.

The study partners are collaborating to identify and to evaluate non-structural adaptation strategies to improve water supply reliability in the four Reclamation reservoirs of western Oklahoma: Foss, Fort Cobb, W.C. Austin, and Tom Steed. The non-structural adaptation strategies align with the "Water Supply Reliability" recommendations of the 2012 Update of the Oklahoma Comprehensive Water Plan (OCWP).[2]

The study partners have commissioned numerical groundwater-flow (GW) models for the Upper Washita River Alluvial Aquifer and the Rush Springs Aquifer in the Upper Washita River

[1] United States Department of Interior, Bureau of Reclamation, Memorandum of Agreement No. R13MA60023 for Upper Washita Basin Study (March 2013); United States Department of Interior, Bureau of Reclamation, Memorandum of Agreement No. 15AG640050 for Upper Red River Basin Study (December 2014).

[2] OWRB, 2012 Oklahoma Comprehensive Water Plan – Executive Report (February 2012) at p. 15 (Water Supply Reliability).

Basin.[3] In addition, the study partners have commissioned a stream water allocation (SWAM) model on the Upper Washita River from where it enters Oklahoma until downstream past the Fort Cobb Reservoir, as well as updating firm yield models for Foss and Fort Cobb Reservoirs.[4]

Similarly, the study partners have commissioned a numerical groundwater-flow (GW) model for the North Fork Red River Alluvial Aquifer.[5] They have also commissioned a stream water allocation (SWAM) model on the Upper Red River Basin from where the North Fork Red River enters Oklahoma until downstream to the main stem of the Red River at the southern border of Oklahoma with Texas, as well as firm yield updates on the W.C. Austin and Tom Steed Reservoirs.[6]

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[3] Upper Washita River Alluvial Aquifer Studies: United States Geological Service, Hydrogeology, Numerical Simulation of Groundwater Flow, and Effects of Future Water Use and Drought for Reach 1 of the Washita River Alluvial Aquifer, Roger Mills and Custer Counties, Western Oklahoma, 1980-2015 (Scientific Investigation Report 2020-5118).

Rush Springs Aquifer Studies: Oklahoma Water Resources Board, Hydrologic Investigation Report of the Rush Springs Aquifer in West-Central Oklahoma, 2015 (OWRB Publication 2018-01); United States Geological Service, Simulation of Groundwater Flow and Analysis of Projected Water Use for Rush Springs Aquifer, Western Oklahoma (Scientific Investigations Report 2018-5136); United States Geological Service, Simulated Effects of Groundwater Withdrawals on Streamflow Depletion in the Rust Springs Aquifer upgradient from Fort Cobb Reservoir, western Oklahoma (DRAFT Proposed April 2020).

[4] Bureau of Reclamation, Reservoir Operations Pilot Study Final Report: Washita Basin Project, Oklahoma (May 2018).

[5] United States Geological Service, Hydrogeology and Simulated Groundwater Flow and Availability in the North Fork Red River Aquifer, Southwest Oklahoma, 1980-2013 (Scientific Investigations Report 2017-5098); United States Geological Service, Simulated Effects of Groundwater Withdrawals on Base Flow Depletion in the North Fork Red River upgradient from Lake Altus, Oklahoma (DRAFT Proposed July 2017).

[6] W.C. Austin and Tom Steed Reservoirs Studies: Bureau of Reclamation, Upper Red River Basin Study: Impacts of Status Quo Management of Water Availability in the Lugert-Altus Hydrologic Basin (DRAFT April 2019); Bureau of Reclamation, Upper Red River Basin Study: Impacts of Status Quo Management on Water Availability in the Tom Steed Reservoir Hydrologic Basin (DRAFT April 2019).

Tom Steed Reservoir Studies: Bureau of Reclamation, Tom Steed Reservoir Firm Yield Analysis (DRAFT January 2021); Bureau of Reclamation and OWRB, Upper Red River Basin Study: Formulation of Curtailment Alternatives in the Tom Steed Reservoir Hydrologic Basin (DRAFT January 2021)

W.C. Austin Reservoir Studies: Bureau of Reclamation, Lugert-Altus Reservoir Firm Yield Analysis (DRAFT XX 2021 to be completed); Bureau of Reclamation and OWRB, Upper Red River Basin Study:

These Upper Washita River Basin (UWRB) hydrological studies and Upper Red River Basin (URRB) hydrological studies provide the technical information upon which the study partners can make decisions about improving water supply reliability for the four reservoirs. Foss and Fort Cobb are in the Upper Washita River Basin; W.C. Austin and Tom Steed are in the Upper Red River Basin.

As the technical studies began, the study partners concluded that an evaluation of the water rights for the four reservoirs would also be helpful. The study partners desired to learn how federal and state statutes governing these water rights, OWRB regulations implementing Oklahoma statutory law, and federal and state judicial decisions relating to water rights for the four reservoirs conditioned, controlled and impacted the water supply and water management for the four reservoirs. By combining technical studies with a legal review of water rights, the study partners hoped to gain the information needed to make informed decisions leading to improved water supply reliability for the four reservoirs.

This academic legal review is the work product of the legal review of water rights and water supply reliability for the four reservoirs. Reclamation signed a grant agreement with the University of Oklahoma for the completion of this academic legal review. Drew L. Kershen, an emeritus law professor from the University of Oklahoma College of Law who taught water law at the College of Law for more than twenty years, was the principal investigator.[7] Reclamation

Formulation of Curtailment Alternatives in the Lugert-Altus Reservoir Hydrologic Basin (PROPOSAL January 2021).

[7] Grant Agreement between Bureau of Reclamation and The Board of Regents of the University of Oklahoma for Upper Washita and Upper Red River Basin Studies, A Legal Review of Adaptation Strategies: Constraints and Opportunities (Agreement No. R17AP00090, dated September 22, 2017). Scope of Work Agreement between the

was the lead study partner for the management, supervision, and completion of the work by Professor Kershen. The other study partners cooperated by providing information, review, comments, and discussion on this academic legal review.

OBJECTIVES

The study partners and Professor Kershen agreed upon a legal review having six chapters with the following objectives for each specific chapter.

Chapter One is an introductory chapter that has three tasks. The first task is to inform the reader about the origins of this legal review and its purpose -- that is, to review the water rights of the four reservoirs. The Introduction section of Chapter One does task one. The second task is to explain very briefly the objective for each of the chapters of the legal review. The Objectives section of Chapter One does task two. The third task is to set forth the author's goals for this academic legal review – what the author hopes to accomplish in this legal review. This is the Goals section of Chapter One.

Chapter Two is a presentation of the legal background for the review of four reservoirs' water rights. In Chapter Two, the author (Professor Kershen) presents information, explanation, and interpretation about each of the bodies of law that informs the overall legal review. In the legal background, there are three main bodies of law.

First, Federal law provides relevant statutory and case law because all four reservoirs are federal projects. Most important for federal law is the Reclamation Act of 1902 plus its amendments and judicial decision interpreting the Reclamation Act. Supreme Court decisions

Bureau of Reclamation and Drew L. Kershen (dated August 4, 2017). Both the Grant Agreement and the Scope of Work are in the files of Reclamation and the author.

on tribal jurisdiction are also important.

Second, Oklahoma water law is relevant to the water rights and water management of the four reservoirs. Oklahoma statutory law provides the framework within which the four reservoirs obtain their water rights. Moreover, Oklahoma statutory law is not just the present water law statutes of Oklahoma but also previous statutes in effect at the time the reservoirs came into existence and that have applied to these reservoirs at various times from their legal beginning to the present day. Furthermore, Oklahoma administrative agencies have implemented Oklahoma statutes and regulated these four reservoirs from their beginning to the present. Regulations of the OWRB serve as the focus for this aspect of Oklahoma law. Finally, Oklahoma judicial decisions have addressed legal disputes relating to the water rights of these four reservoirs. The relevant Oklahoma water law involves both the stream water law regime and the groundwater law regime as these regimes have existed in the past and evolved into the present.

Third, Western Water Law is relevant as a source of ideas and concepts that the study partners may find useful in the management of the water rights and water supply of these four reservoirs. Oklahoma water law for stream water follows the basic principles of the prior appropriation system of water law. Hence, Oklahoma stream water law shares many legal concepts and legal issues with the western states (from the Central Plains to the Pacific Ocean) of the United States that also use the prior appropriation system of water law. While Federal law and Oklahoma law are authoritatively binding upon the four Reclamation reservoirs, Western Water Law is only a source of ideas and concepts – a secondary, persuasive body of law.

Chapters Three, Four and Five focus specifically upon each of the four Reclamation reservoirs. Chapter Three focuses on Mountain Park Master Conservancy District (the Tom Steed Reservoir). Chapter Four focuses on the Luget-Altus Irrigation District (the W.C. Austin Reservoir). Chapter Five focuses on the two Upper Washita River Basin reservoirs – Foss Reservoir Master Conservancy District (Foss Reservoir) and Fort Cobb Reservoir Master Conservancy District (Fort Cobb Reservoir).

In Chapters Three, Four and Five, the author discusses the history of the planning and development of the focal reservoir, the specific federal authorizing legislation for each reservoir, the Oklahoma water right applications and the water right permits of each reservoir, judicial decision about water law generated by these reservoirs, and the discussions/agreements between the four Districts and Oklahoma regulatory agencies (primarily the Oklahoma Water Resources Board) about water rights and water management. The author provides a discussion of how federal, Oklahoma, and Western water law applies to the unique circumstances of each reservoir. The author also presents his interpretation of the water rights presently existing for each reservoir and possible claims to additional water rights that each reservoir might presently assert or might claim going forward. The author discusses and interprets both stream water law, as applied to the Upper Washita River Basin and the Upper Red River Basin, and groundwater law as applied to the aquifers that underlie the rivers and the lands that constitute the catchment basin of the four reservoirs. Thus, Chapters Three, Four and Five provide an in-depth analysis of how background water law (federal, Oklahoma, and Western) applies to the individual histories and circumstances of each of the four reservoirs.

Chapter Six is the Concluding Chapter. In Chapter Six, the author briefly sets forth general and specific observations and conclusions that he has reached through the research, discussions, mental meanderings, writing and revisions of this academic legal review. Chapter Six is not a set of recommendations; Chapter Six is not a set of answers to the many questions raised and addressed in the preceding chapters. Chapter Six hopefully brings this academic legal review to a close in thoughtful, gentle, humble words, sentences and paragraphs.

GOALS

1. Thorough examination and explanation of relevant federal and state law and Western water law ideas and concepts.
2. Careful discussion and analysis of the legal issues relevant to the four reservoirs raised by the laws, regulations, judicial decisions, technical studies, historical documents and secondary authorities (i.e., law review articles and other monographic reports and studies) about reservoir water rights and water management.
3. Thoughtful presentation of options and alternatives concerning legal issues relevant to the four reservoirs.
4. Consistency in substance, coverage, and format in each of the four substantive chapters (Chapters 2-5) of this academic legal review while taking into account the unique circumstances and histories of each individual reservoir.
5. Clear organization and clear writing throughout this academic legal review so that the reader may easily follow and understand this document.
6. Quality tables of content so that the reader can easily consult this document to address

specific questions relevant to that individual reader.

If this academic legal review achieves the above six goals, the author expresses confidence that this academic legal review will have significant value now and in the future for the study partners and for the general public.

The author emphasizes that he does not claim to provide "the answer" to the legal issues addressed. Rather, the author has sought to provide clarity to issues, ways of thinking about issues, and fresh eyes on issues so that those who have the legal and managerial authority over these four reservoirs can make informed decisions about water rights and water management for each individual reservoir. Those with legal and managerial authority over these four reservoirs have vast amounts of practical, experiential, and institutional knowledge of water rights and water management related to these four reservoirs that the author of this academic legal review cannot gain or match despite reading volumes of material related to these four reservoirs. And, of course, any failures of research, clear misunderstandings/clear misinterpretations of legal and secondary authorities, and confusing or infelicitous words, sentences, paragraphs and footnotes are the sole responsibility of the author.

With this final paragraph to Chapter One: Introduction, Objectives and Goals, the author invites the reader to continue into the fascinating and important story of the water rights and water management of Tom Steed Reservoir, W.C. Austin Reservoir (Lugert-Altus Irrigation District), Foss Reservoir, and Fort Cobb Reservoir.

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CHAPTER TWO: BACKGROUND LAW

INTRODUCTION

Background law means the policies, statutes, regulations, and judicial opinions that underpin water rights for the four districts: Foss Reservoir Master Conservancy District, Fort Cobb Reservoir Master Conservancy District, Lugert-Altus Irrigation District, and Mountain Park Master Conservancy District (Districts). This chapter has the purpose of elucidating this background law in a clear and coherent fashion so that the reader of this Report has an understanding of the background law influencing the Districts' water rights. This chapter does not endeavor to explain the specific water rights of each District. Other chapters in this report address the specific water rights of each District using the background law as applied to the individual situations of each District. Hence, this chapter – background law – is about the general water law while other chapters will be about the specific water rights for each District as built upon the general, background water law.

In describing and explaining the background law, three sources exist: background law from the United States of America (referred to as federal law), background law from the State of Oklahoma (referred to as Oklahoma law), and background law from other states in the western United States (referred to as western law). Each of these three sources provide policies, statutes, regulations, and judicial opinions that influence the author's understanding of the Districts' water rights and judgments about specific issues related to those water rights.

FEDERAL LAW

The four reservoirs are Bureau of Reclamation reservoirs. The Bureau of Reclamation is within the United States Department of the Interior. Appropriately, the chapter on background law should begin with federal law.

Reclamation Law

The fundamental law for the Bureau of Reclamation is the Reclamation Act of 1902[1] and its various amendments.[2] More specifically regarding water rights, Section 8 of Reclamation Act is the most significant and is quoted in full:

> Nothing in this act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State or Territory relating to the control, appropriation, use, or distribution of water used in irrigation, or any vested right acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of this act, shall proceed in conformity with such laws, and nothing herein shall in any way affect any right of any State or of the Federal Government or of any landowner, appropriator, or user of water in, to, or from any interstate stream or the waters thereof;[3] *Provided* that the right to the use of water acquired under the provisions of this act shall be appurtenant to the land irrigated and beneficial use shall be the basis, the measure, and the limit of the right."[4]

Section 8 has remained in its original language (unamended) since 1902 until 2018.

Over the past 116 years, not surprisingly, various persons, organizations, and commentators have argued for differing and conflicting interpretations of Section 8[5] – both on

[1] Act of June 17, 1902, c.1093, 32 Stat. 390 as codified in 43 U.S.C. § 371 *et. seq.* (2018).

[2] The four reservoirs that are the focus of this Report also have specific laws authorizing the initiation and completion of each reservoir. These specific authorizations are for discussion in later chapters of this Report and are not addressed in this Chapter 2 on Background Law.

[3] The language of Section 8 to this point is codified as 43 U.S.C. § 383 (2018).

[4] The proviso of Section 8 is codified as 43 U.S.C. § 372 (2018).

[5] Donald J. Pisani, Merrick Professor of Western American History (Emeritus), University of Oklahoma, is the leading modern historian of the Bureau of Reclamation. His published work provides the historical context and discussion of the differing and conflicting views about water rights under Reclamation Act of 1902. D. Pisani,

matters of general principle and particular application in the multiple disputes arising from Bureau of Reclamation projects.[6] Several questions recur in the disputes about water rights under Section 8.

Whose law creates and defines the water rights under Section 8 needed for Reclamation projects? The most straight-forward answer is that Section 8 evidences Congressional intent to defer to state law in the creation and definition of water rights for Reclamation projects. Hence, the Bureau of Reclamation gains its water rights for projects under the various state laws. In most regards, Reclamation is legally situated like any other claimant to water rights within a state system. Moreover, Reclamation is subject to the same limitations and conditions on its water rights as other applicants within the various states. The Supreme Court decision that most clearly sets forth this "state-preferred" interpretation of Section 8 is *California v. United States*, 438 U.S. 645 (1978). And the implications of this Supreme Court decision deferring to state law can best be understood by following *California v. United States* on remand to the lower federal courts where these courts upheld state conditions being placed upon a Reclamation project.[7]

WATER and AMERICAN GOVERNMENT: Reclamation Bureau, National Water Policy and the West, 1902-1935 (Univ. of California Press, 2002); D. Pisani, WATER, LAND, and LAW in the WEST: The Limits of Public Policy, 1850-1920 (Univ. Press of Kansas, 1996); D. Pisani, *Federal Reclamation in the Twentieth Century: A Centennial Retrospective* in RECLAMATION: MANAGING WATER IN THE WEST (U.S. Dept. Interior, Bureau of Reclamation, 2008).

[6] The best compilation of these disputes and interpretations is found within the Bureau of Reclamation's own reference series: L. Mauro & R. Pelz (eds.), FEDERAL RECLAMATION AND RELATED LAW ANNOTATED (U.S. Dept. of Interior) Volume I through Volume V (1902-1998) with Supp. I and Supp. II through 2008.

[7] *United States v. California State Water Resources Control Board*, 694 F.2d 1171 (9th Cir. 1982); *United States v. California*, 521 F. Supp. 491 (E.D. Calif. 1980).

Indeed, the last proviso of Section 8, now 43 U.S.C. § 372, has generally been given the interpretation that Congress meant this federal statutory language to reenforce similar language in the prior appropriation water laws of the various states. Rather than Congress creating water rights, Congress expressly was deferring to state water laws.[8]

Despite the "state-preferred" interpretation of Section 8, the Supreme Court and the lower federal courts have not forgotten Article VI, clause 3 [Supremacy Clause] of the United States Constitution. It is important to remember that there is a critical distinction between whether Congress has the power to enact specific laws – e.g. a Water Code for the United States – and whether Congress has exercised that power. Congress has never enacted a Water Code for the United States, regardless of whether Congress does or does not have the constitutional power to do so.[9]

Yet, when Congress exercises its legislative power to mandate specific goals or specific results, Congress has supremacy over state laws. States cannot lawfully overturn federal law or create conflicts with federal law. Federal law is the supreme law of the United States. Thus, under the Reclamation Act, Congress has granted Reclamation the power of eminent domain and limited the number of acres owned by a single person that are eligible for water from Reclamation projects. The Supreme Court has upheld these express congressional decisions

[8] *E.g.*, *El Paso County Water Imp. Dist. No. 1 v. City of El Paso*, 133 F. Supp. 894 (W.D. Tex. 1955).

[9] For an example of Congress exercising broad power that emphasizes the supremacy of federal law over state law, one can think of the Federal Power Act as interpreted by the Supreme Court in *First Iowa Cooperative v. Federal Power Commission*, 328 U.S. 152 (1946). As the Federal Power Act deals with rivers and streams, the *First Iowa Cooperative* case is quite a contrast to the Supreme Court's *California v. United States* with its "state-preferred" interpretation of Section 8 of Reclamation Act.

despite state laws to the contrary.[10] However, even in these Supreme Court Reclamation decisions emphasizing federal law as supreme over state law, the Supreme Court has made clear that federal law relating to the operation or management of Reclamation projects is distinct from the "state-preferred" acquisition of water rights and definition of those water rights as set forth in Section 8 of Reclamation Act.[11]

Without providing a detailed analysis of the judicial decisions relating to the relationship between state water law and federal operation and management of Reclamation projects, the author provides a few thoughts about this relationship specific to Oklahoma.

Under Oklahoma stream water law, the United States has the statutory right to apply for water for Reclamation projects.[12] In that same statutory provision, the Oklahoma Legislature expressly gave the Oklahoma Water Resources Board the authority to reduce the amount of water requested by the United States, or attach conditions to the proposed withdrawal of water by the United States, or reject the request for withdrawal of water in its entirely. In other words, as Reclamation begins to plan for a water project, Oklahoma can reduce, condition, or deny the water that Reclamation requests for the proposed project. If Reclamation cannot obtain sufficient water to justify the proposed project, Reclamation would assuredly decide against proceeding with the proposed project. Reclamation is not going to build a project without assuring itself that it has adequate water available to make the project viable.

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[10] *City of Fresno v. California*, 372 U.S. 627 (1963); *Ivanhoe Irr. Dist. v. McCracken*, 357 U.S. 275 (1958).

[11] *Ivanhoe Irr. Dist.* at 291-292.

[12] Okla. Stat. Tit. 82 § 105.29 (2011).

Let us suppose that Reclamation initially obtains sufficient water, gains Congressional authorization to build a project, and does build the project – as has occurred for the four reservoirs that are the focus of this report. Oklahoma likely could not thereafter impose conditions or reach decisions about Oklahoma water law and water rights that would seriously threaten the viability the built project. At this later point in time, Oklahoma actions that seriously threaten the viability of the built project pose significant unresolved legal issues involving the supremacy of federal law for the operation and management of the project.[13]

In summary, whose laws create and define water rights for Reclamation projects? Answer: the laws of the State of Oklahoma create and define the water rights for the four reservoirs – Foss, Fort Cobb, Lugert-Altus, and Mountain Park. Caveat: the laws of the State of Oklahoma cannot seriously threaten the viability of completed Reclamation projects.

Another recurring question under Section 8, who owns the water or the water rights in a Reclamation project? Or, as Professor Reed Benson explains,[14] the ownership of water is shared among several parties involved in a Reclamation project, depends upon state law (meaning that the ownership varies from state to state), and cannot be answered in the abstract because "ownership" depends upon the specific questions being asked.[15]

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[13] The author purposefully leaves the phrase "seriously threaten the viability of the project" vague and underdeveloped. In this report, the author does not have the remit to write a law review article on this legal issue.

[14] R. Benson, *Whose Water Is It? Private Rights and Public Authority over Reclamation Project Water*, 16 VIRG. ENV'L L. J. 363-427 (1997).

[15] R. Benson at 367-368.

In agreement with Professor Benson, four parties are the contenders when answering the question: whose water is it? –the state government, the federal government, the entity responsible on a daily basis for the operation of a Reclamation project, and the end users of the water from the Project. To be more precise with respect to the four reservoirs discussed in this Report: the State of Oklahoma, the Bureau of Reclamation, the Master Conservancy Districts, and the municipal, industrial, and agricultural uses of the water stored in the reservoirs.

When thinking of the State of Oklahoma, the reader should not think of Oklahoma as an owner of the water in a traditional sense of ownership. Rather, the State of Oklahoma is the sovereign over the waters of the State of Oklahoma. As sovereign, Oklahoma exercises several forms of sovereign power that impact the waters of the state.

First, Oklahoma exercises the sovereign power to create state water policies, laws, and regulations. These Oklahoma state laws create and define the water rights for the four reservoirs. These Oklahoma state laws are the source of water rights to which Section 8 of Reclamation Act of 1902 refers and defers.

Second, Oklahoma, as sovereign, acts as a trustee over the waters in the streams, lakes, ponds, and rivers of the State of Oklahoma. Oklahoma holds the waters of the state in trust for the public – the citizens, non-citizens, and entities – that desire to use the waters of the state. Oklahoma acting as trustee for the use of water by the public is most clearly exemplified by the state water law doctrine of prior appropriation for stream water. At its most basic tenet, the public of Oklahoma, except for limited rights of domestic use, must apply to the State before the public can access and use the stream waters within the state. Once the State, through the

Oklahoma Water Resources Board, grants access to and use of stream water, the public acquires a water right for use. The prior appropriation doctrine of water law is a concrete manifestation of the State of Oklahoma as a sovereign trustee over its stream waters.

Third, Oklahoma, as sovereign, exercises police power over the waters of the state. Examples of the police power include the environmental laws of the State that protect the quality of both stream water and groundwater in the state. More importantly for this study, Oklahoma exercises police power over the groundwater of the state. Under Oklahoma statutory law, the landowners overlying an aquifer own the groundwater beneath their lands.[16] But Oklahoma, through the Oklahoma Water Resources Board, has used its police power to enact laws that regulate when, where, and how the landowner can access groundwater.[17]

When turning to the Bureau of Reclamation, there is no doubt that Reclamation will not build a project unless Reclamation has satisfied itself that adequate water rights exist to make the project feasible. However, as the Supreme Court of the United States has explained,[18] having adequate water rights for a project does not mean that Reclamation has become the owner of those water rights. Rather, Reclamation owns the reservoir, the ditches, and the canals of the project, but Reclamation does not own the water rights.[19] Consequently, as will be more fully

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[16] Okla. Stat. Tit. 60 § 60 (2011).

[17] The Oklahoma Groundwater Law – Okla. Stat. Tit. 82 §§ 1020.1-1020.22 (2011).

[18] *Nebraska v. Wyoming*, 325 U.S. 589 (1945).

[19] *Nebraska v. Wyoming* at 611-615. *See also*, *Ickes v. Fox*, 300 U.S. 82 (1937).
Section 6 of Reclamation Act prescribes the manner and method by which the ownership of the reservoir, ditches, and canals can pass from Reclamation to others involved in the project. However, Reclamation retains title to the infrastructure in all four projects involved in this study. Section 6 has never been invoked in Oklahoma.

discussed later in this Chapter, it is best to think of Reclamation, certainly in Oklahoma, as withdrawing water rights for particular projects. But Reclamation does not become an owner of those withdrawn water rights.[20]

When turning to the end-users of the stored water in the projects, the proviso of Section 8 appears to give the end-users a strong claim to ownership of the water rights of project water. The proviso states, "[T]he right to the use of water acquired ... shall be appurtenant to the land irrigated and beneficial use shall be the basis, the measure, and the limits of the right." By this language, Section 8 reenforces basic principles of state prior appropriation water law: beneficial use and appurtenancy. In Oklahoma, an applicant for a water right must put the water right to a beneficial use in order to perfect the water right[21]. Also in Oklahoma, while irrigation is a beneficial use, the water right for irrigation is appurtenant to the land irrigated.[22] Hence, under both Section 8 and Oklahoma water law, the irrigation users of the Lugert-Altus project have a strong claim to ownership of the water rights put to beneficial use on their irrigated lands.[23] Similarly, if project water is identified for particular municipalities as municipal water, these municipalities as the beneficial users of the water have a strong claim to ownership of these municipal water rights.

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[20] *Hudspeth County Conservation and Reclamation Dist. No. 1 v. Robbins*, 213 F.2d 425 (5th Cir. 1954), *cert. denied* 348 U.S. 833 (1955).

[21] Okla. Stat. Tit. 82 § 105.2(A) (2011).

[22] Okla. Stat. Tit. 82 § 105.22 (2011).

[23] *United States v. Humboldt, Lovelock Irr. Light & Power Co*., 19 F. Supp. 489 (D. Nev. 1937), *reversed on other grounds* 97 F.2d 38 (1938).

Yet, it is too simplistic to conclude that the end-users of the project water are the owners of the water in these four projects. First, Oklahoma water law recognizes the Master Conservancy Districts for Foss, Fort Cobb, Mountain Park and Lugert-Altus Irrigation District as the applicants for water rights in the stored waters of the reservoirs. In fact, the Oklahoma Water Resources Board issues stream water permits to the Master Conservancy Districts. The Master Conservancy Districts and the Irrigation District are created and empowered under Oklahoma statutes.[24] Second, since 1926 Congress has required Reclamation to interact with an intermediary, such as a Master Conservancy District or an Irrigation District created by state law, for the distribution of project water.[25] In response, Oklahoma law authorizes Master Conservancy Districts to enter into contracts with Reclamation to serve as an intermediary.[26] Hence, the Master Conservancy Districts or Lugert-Altus Irrigation District directly control the distribution of their project water through contracts with the municipal, industrial, and agricultural end-users of the water. These contracts must be carefully considered to determine the various claims to water rights in the stored water of the four reservoirs. Finally, since 1911 in the Warren Act,[27] Congress has recognized that Reclamation reservoirs may store waters in excess of the water specifically identified to various end-uses meant to be the beneficiaries of Reclamation projects. Congress authorized Reclamation, and after 1926 the intermediaries, to

[24] Okla. Stat. Tit. 82 § 541 et. seq. (2011) [Master Conservancy Districts]; Okla. Stat. Tit. 82 § 277 et seq. (2011) [Irrigation Districts].

[25] R. Benson, *supra* note 14 at 387-389.

[26] Okla. Stat. Tit. 82 § 541.1 (2011).

[27] Act of February 21, 1911, ch. 141, 36 Stat. 925, codified at 43 U.S.C. 523-525 (2018).

contract for the use of this "excess" water. The Master Conservancy Districts and the Lugert-Altus Irrigation District may well have control over "excess" waters that these entities distribute to end-users through contracts. These excess-water contracts also must be considered in determining the various claims to water rights in the stored waters of the projects.

Beginning with Reclamation Act in 1902, Reclamation projects have been intertwined with irrigation projects. However, as early as 1906, Reclamation was authorized to provide a municipal water supply to a community that had pre-existing water rights in the same source as the project water.[28] But Reclamation projects continued to be intertwined with irrigation projects for the next three decades. In Reclamation Project Act of 1939,[29] Congress authorized Reclamation to undertake multiple purpose water supply projects, including projects that specifically were intended and limited to the providing of a municipal water supply.[30] When Reclamation provides a water supply to a municipal beneficiary of a project, the operating entity does so through water supply contracts.

In summary, whose water is it? It is easier to say that the State of Oklahoma and the Bureau of Reclamation are not the owners of the water or water rights stored in the four Reservoirs. By contrast, both the municipal, industrial, agricultural end-users of the water and the Master Conservancy Districts and Lugert-Altus Irrigation District have claims to the water and water rights in the projects. Precisely who has what claims must wait for further, more-

[28] Act of April 16, 1906, c. 1631, § 4, 34 Stat. 116..

[29] Act of August 4, 1939, c. 418, 53 Stat. 1187.

[30] Act of August 4, 1939 §§ 9(a) and 9(c). Solicitor Bennett Opinion, 65 I.D. 129 (1958).

careful explanation found in the discussions in this Chapter related to Oklahoma water law and in the Chapters related to each specific Reservoir.

When discussing water rights and ownership of those rights, it is also necessary to recognize the distinction between storage rights and beneficial use rights. Oklahoma distinguishes between storage rights – i.e. the right to trap water within a reservoir to the reservoir capacity – and the right to use water for a beneficial purpose – e.g. the beneficial purpose of irrigation. The four reservoirs have state permission to trap water within the reservoir to reservoir capacity. Moreover, the Bureau of Reclamation is entitled to payment reimbursement from project beneficiaries for building the dam, the project facilities and for providing the storage capacity of the reservoir to hold water. But storage rights do not carry the same legal classification as property rights when compared to beneficial use rights. In Oklahoma, water rights in stream waters – the recognized property right in water – most clearly and firmly attaches when a person applies for unappropriated water for a beneficial use and then puts the water applied for to an actual beneficial use.. In other words, the storage of water itself does not create a water right. A legally recognized water right comes most clearly into recognition when a specified quantity of water is put to a beneficial use as defined by Oklahoma law.

Recognizing the distinction between storage rights and water rights still leaves the question: does somebody (Reclamation or the Master Conservancy Districts) own storage rights? From the author's understanding of federal and state law, the answer is most likely "No." Rather than owning storage rights, Reclamation or the Master Conservancy Districts act as trustees over

the water in storage for the public of Oklahoma generally and the beneficial users of the water (the water-rights holders) in particular. The stored water itself, however, is simply stream water trapped in a reservoir within the prior appropriation system. Fuller discussion of stored water exists further on in this legal review in **Oklahoma Law:** Excess or Surplus Waters in Reservoirs.

Tribal Jurisdictional Claims

In the case of *McGirt v. Oklahoma,*[31] the Supreme Court of the United States ruled that the Creek Nation Reservation of 1866 exits today and has not been diminished or disestablished. The *McGirt* decision means that the Muscogee (Creek) Nation has geographical sovereignty (jurisdiction) over the land within the boundaries of the 1866 Reservation. In addition, the author opines that there is little doubt that the *McGirt* decision means that the 1866 Reservations of the Cherokee, Chickasaw, Choctaw and Seminole Nations in eastern Oklahoma also continue in existence today. Although the McGirt decision is only about criminal jurisdiction, there is also little doubt that the McGirt decision extends to civil matters such as jurisdiction over the management of natural resources, including water.[32]

The four reservoirs of this report reside in western Oklahoma. The 1866 Reservations of the Cherokee, Chickasaw, Choctaw, Muscogee (Creek) and Seminole Nations are all in eastern Oklahoma and do not encompass any of these four reservoirs. Thus, the *McGirt* decision does not directly apply to western Oklahoma. However, the implication presented by the *McGirt*

[31] *McGirt v. Oklahoma*, ___ U.S. ___, 140 S.Ct. 2452 (2020). *See also*, *Sharp v. Murphy*, ___ U.S. ___, 140 S.Ct. 2412 (2020).

[32] *McGirt* at pp. 2480-2482 (J. Gorsuch for the majority) and pp. 2501-2501 (C.J. Roberts in dissent).

decision is that tribal reservations might continue to exist in western Oklahoma.[33] The author predicts that litigation is likely about this implication. In anticipation of this future litigation, therefore, this report must take into account the following question: Do tribal reservations, non-diminished or not disestablished, exist in western Oklahoma that geographically encompass any of the four reservoirs? As tribal history, geography and boundaries are different for each of the four reservoirs, the author believes that this question is best discussed in the individual chapters addressing the water rights of each District.

However, if a Tribal Nation has a reservation, non-diminished or not disestablished, encompassing any of the four reservoirs, then under the *McGirt* decision, that particular Tribal Nation would have sovereign powers (jurisdiction) over the land and water of that specific reservoir. Thus, the Districts could have three sovereigns asserting jurisdiction over their reservoirs – the federal government, the State of Oklahoma, and the particular Tribal Nation.

The author does not attempt to resolve the jurisdictional legal issues that might arise. The author does not have the ability to predict what precise legal issues might come to the forefront. Moreover, the author does not have the remit to address the complex and difficult legal issues that would arise under the three sovereigns scenario. The author does have the remit to highlight that tribal jurisdictional claims are likely to arise and, therefore, are likely to have significance for the water rights of individual Districts, if a reservoir resides within a non-diminished or not disestablished reservation.

[33] *See e.g., Oneida Nation v. Village of Hobart*, 968 F.3d 664 (7th Cir. 2020) (based on *McGirt*, holding that the Oneida Nation reservation still exists and has not been diminished or disestablished).

OKLAHOMA LAW

Oklahoma stream water law can be divided into two distinct eras. Beginning with the Oklahoma statutes of 1910, the statutes of Oklahoma governing stream water, except for several minor amendments, remained basically unchanged through 1963.

The second era of Oklahoma stream water law began to emerge with the creation of the Oklahoma Water Resources Board (OWRB) in 1957.[34] In the same 1957 legislation, the Oklahoma Legislature authorized and directed the newly established OWRB "to engage in a continuing study of the water laws of this State, and of changes therein required ..."[35] In order to guide this continuing study, the Legislation adopted House Joint Resolution # 102 (HJR # 102) setting forth policy "to be followed in drafting and considering future legislation."[36]

Working with the Legislative Council, the OWRB established a study group, called the Citizens' Committee, that engaged Professor Joseph Rarick of the University of Oklahoma, College of Law, as its Reporter.[37] From 1957 through 1972, the study group drafted and promoted a legislative agenda that ultimately resulted in the adoption of a new stream water law

[34] Laws 1957, pp. 545-548. §§ 1-7 (May 29, 1957), codified in Okla. Stat. Tit. 82 §§ 1071-1079 (1959 Supp.).
[35] Okla. Stat. § 1078 (1959 Supp.).

[36] The text of HJR #102 is set forth in full as a note to Okla. Stat. §1078 pp. 1220-1221 (1959 Supp.).

[37] Professor Rarick chronicled the study group's work in a series of articles as follows: J. Rarick, *Appropriator vs. Riparian, A Preliminary Examination*, 10 Okla. L. Rev. 416 (1957); J. Rarick, *The Right to Use Water from a Stream*, 29 Okla. B.J. 1958 (1961); J. Rarick, *The Streams of Oklahoma as a Source of Municipal Water Supply*, 30 Okla. B.J. 1281 (1962); J. Rarick, *Oklahoma Water Law, Stream and Surface, in the Pre-1963 Period*, 22 Okla. L. Rev. 1 (1969); J. Rarick, *Oklahoma Water Law, Stream and Surface, under the 1963 Amendments*, 23 Okla. L. Rev. 19 (1970); J. Rarick, *Oklahoma Water Law, Stream and Surface, the Water Conservation Storage Commission and the 1965 and 1967 Amendments*, 24 Okla. L. Rev.1 (1971).

in 1963.[38] With this study group and its legislative output, Oklahoma entered the second era of its stream water law – an era that, with many significant amendments in statutory language, continues into 2018.

When the Oklahoma Legislature adopted the 1963 stream water law, the Legislature enacted the following language:

> Beneficial use shall be the basis, the measure and the limit of the right to the use of water; provided, that water taken for domestic use shall not be subject to the provisions of this Title. Any natural person has the right to take water for domestic use from a stream to which he is riparian or to take stream water for domestic use from wells on his premises ..."[39]

By using this quoted language in § 1-A(a), the Legislature meant to restrict riparian rights to water to domestic uses for those who are riparian on streams.

In 1988, the Legislature adopted additional statutory language to make clear that riparian rights to water in Oklahoma were limited solely to domestic riparian rights. The 1988 statute reads as follows:

> From and after June 10, 1963, the only riparian rights to the use of water in a definite stream, except water taken for domestic use, are those which have been adjudicated and recognized as vested through the proceedings under 82. O.S. Supp. 1963, Sections 5 and 6, orders of the Oklahoma Water Resources Board entered thereunder which became final, and those decreed to exist in the Spavinaw, Grand, North Canadian, and Blue and North Boggy adjudications, all to the extent such rights have not been lost, in whole or in part, due to nonuse, forfeiture or abandonment, pursuant to this title.[40]

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[38] Laws 1963 c. 205 & c. 207 (eff. June 10, 1063), codified in Okla. Stat. Tit. 82 §§ 1, 4-6, 11-13, 21-25 (1970 Supp.). The study group proposed and the Legislature adopted additional stream water statutes in 1965 and 1967.

[39] Okla. Stat. Tit. 82 § 1-A(a) (1971), codified today as Okla. Stat. Tit. 82 § 105,2(A) (2011).

[40] Laws 1988, c. 203 § 2 (eff. June 10, 1988), codified at Okla. Stat. Tit. 82 § 105.2(D) (2011).

Finally, in 1993, the Oklahoma Legislature enacted a new statutory section declaring that the purposes of the Oklahoma stream water law of 1963 was to replace "the incompatible dual systems of riparian and appropriative water rights ... with an appropriation system of regulation ... and to extinguish future claims to use water, except for domestic use, based only on ownership of riparian lands."[41] By this 1993 statute, the Legislature made crystal clear that Oklahoma stream water law – in the statutes -- is a prior appropriation system of water rights. In light of these statutes, the Oklahoma Water Resources Board has consistently taken the position that the OWRB manages and regulates the stream waters of Oklahoma through a prior appropriation system of water rights.

As for the riparian domestic use recognized in Tit. 82 § 105.1A, OWRB estimates six acre-feet per household per year and three acre-feet per non-household riparian domestic use.[42] Informal OWRB staff policy also presumes that one riparian household resides on each quarter section of land bordering a stream.[43] OWRB subtracts this protected riparian domestic use from the stream flow when making a determination as to whether unappropriated water exists in a stream for which an applicant has applied.[44]

Although the Legislature has made clear that Oklahoma stream water law is prior appropriation law, with a limited riparian use of water for domestic purposes, the Oklahoma

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[41] Laws 1993, c. 310 § 1 (eff. June 7, 1993), codified at Okla. Stat. Tit. 82 § 105.1A (2011).

[42] Okla. Admin. Code § 785:20-5-5(a)(2) (2014). *See also*, Okla. Admin. Code § 785:20-1-2 **Definitions**: Domestic Use.

[43] D. Couch & C. Klaver, *Beneficial Use in Oklahoma Water Law: Opportunity for Better Management or More Mischief?*, 64 Okla. L. Rev. 615, 640 fn. 136 (2012).

[44] I*d*.

Supreme Court in *Franco-American Charolaise Ltd. V. Oklahoma Water Resources Board*[45] gave constitutional protection under the Oklahoma constitution to riparian rights to water. Clearly the Oklahoma Supreme Court decision creates tension between the prior appropriation system and the riparian system for water rights in the stream waters of Oklahoma. Moreover, the Supreme Court decision creates confusion about the strength of the water rights held by prior appropriators, including prior appropriators of Reclamation reservoir waters.[46] The tension and confusion in Oklahoma stream water law remain unresolved in 2021.[47]

Oklahoma groundwater law followed a different trajectory. From statehood in 1907 until 1949, Oklahoma had only one statute that addressed groundwater. In the Title on Property, Okla. Stat. Tit. 60 § 60 was identical from 1910 through 1961 and read as follows:

> The owner of the land owns water standing thereon, or flowing over or under its surface, but not forming a definite stream. Water running in a definite stream, formed by nature over or under the surface, may be used by him as long as it remains there; but he may not prevent the natural flow of the stream, or of the natural spring from which it commences its definite course, nor pursue nor pollute the same."[48]

In 1949, Oklahoma adopted a groundwater law that purported to govern groundwater using the prior appropriation system of water law.[49] In fact, the Oklahoma agency tasked with

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[45] 1990 OK 44, 855 P.2d 568.

[46] H. Marshall (Note), *Clear as Mud: How Heldermon v. Wright Missed the Opportunity to Clarify Oklahoma's Murky Water Law*, 61 Okla. L. Rev. 843 (2008).

[47] G. Allison, *Oklahoma Water Rights: What Good Are They?*, 64 Okla. L. Rev. 469 (2012).

[48] Okla. Stat. Tit. 60 § 60 (1961).

[49] Laws 1949 pp. 641-646 §§ 1-19 (adopted May 27, 1949), codified in Okla. Stat. Tit. 82 §§ 1001-1019 (1949 Supp.).

administering the groundwater law – the Oklahoma Planning and Resource Board[50] – never used the prior appropriation system.[51] As stated by Professor Rarick, "The point is, however, that the Board never administered the [1949] act as what it was intended to be – a prior appropriation act. In practice, the Board roughly prorated the water among the applicants according to their acreage overlying the basin."[52]

When the Legislature directed the OWRB in 1957 to engage in continuing study of water law, the Legislature guided the study by distinguishing between stream water and groundwater.[53] Regarding groundwater, the Legislature promoted a policy as follows:

> "Each owner of overlying land should be entitled to land water rights in a reasonable share of the available supply of ground water. This right should not be forfeited or lost by failure to develop or use.
> ...
> When and where necessary, land water rights to ground water should be prorated ... according to quantity and quality so that rights of adjacent landowners will not be infringed upon."[54]

In 1972, the study group presented a new groundwater code and the Legislature adopted it.[55] The 1972 Oklahoma Groundwater Law[56] is unique to Oklahoma and adopts landowner

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[50] Okla. Stat. Tit. 82 § 1002 (1949 Supp) (Definitions: "Board."). The Oklahoma Water Resources Board (OWRB) assumed all powers, duties, records, etc. of the Oklahoma Planning and Resources Board in 1957. Okla. Stat. Tit. 82 § 1073 (1959 Supp.).

[51] J. Rarick, *Oklahoma Water Law, Ground or Percolating, in the pre-1971 Period*, 24 Okla L. Rev. 403 (1971).

[52] *Id.* at 421.

[53] HJR # 102, Policy Point V Ownership of Water Resources at p. 1220 (1959 Supp.)

[54] HJR # 102, Policy Point VII Ground Water Rights at p. 1221 (1959 Supp.).

[55] Laws 1972, c. 248 (eff. July 1, 1973).

[56] Okla. Stat. Tit. 82 §§ 1020.1-1020.22 (1980 Supp.).

ownership of groundwater on a prorated basis depending upon the quantity of water in the aquifer and the number of acres of land overlying the aquifer. In statutory language, the quantity is a maximum annual yield (MAY) and the landowner's share is an equal proportionate share (EPS).[57] With amendments, the 1972 Oklahoma Ground Water Law is the governing law for groundwater in 2021.[58]

In the 1972 Oklahoma Ground Water Law, the Legislature set the state policy as a policy of utilization of groundwater resources.[59] In implementing this policy, the OWRB developed the concept of the "life of a groundwater basin or subbasin" as part of the MAY determination. OWRB defined "life of a groundwater basin or subbasin" as follows:

> "... that period of time during which at least fifty (50) percent of the total overlying land of the basin or subbasin will retain a saturated thickness allowing pumping of the maximum annual yield for a minimum twenty (20) year life of such basin or subbasin, provided ... the average saturated thickness will be calculated to be maintained at five feet (5') for alluvium and terrace aquifers and fifteen feet (15') for bedrock aquifers unless otherwise determined by the Board; ..."[60]

The impact of this definition of "life of a groundwater basin or subbasin" appears to be twofold: 1) sufficient water should always exist in the aquifers for domestic use; and 2) full utilization of aquifers occurs as per Legislative policy.

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[57] Okla. Stat. Tit. 82 § 1020.6 (1980 Supp.).

[58] Okla. Stat. Tit. 82 §§ 1020.1-1020.22 (2011).

Professor Rarick intended to write a law review article about the 1972 groundwater amendments. He stated that intention in the final sentence of his 1971 article on the Oklahoma groundwater laws pre-1971. However, Professor Rarick never fulfilled that intention.

[59] Okla. Stat. Tit. 82 § 1020.2(A) (2018).

[60] Okla. Admin. Code § 785:30-1-2 **Definitions** (2014).

With this brief historical background to Oklahoma stream water and groundwater law, the report now turns to discuss specific Oklahoma statutes that impact the water rights of the four Reclamation reservoirs of this study.

United States withdrawal of Oklahoma stream water

From its approval by the Oklahoma Territorial Legislature in 1905 until 1959, Oklahoma had a statute allowing the United States to appropriate Oklahoma water that read as follows:

> Whenever the proper officers of the United States, authorized by law to construct works for the utilization of waters within the State, shall notify the State Engineer that the United States intends to utilize certain specified waters, the waters so described, and unappropriated at the date of such notice, shall not be subject to further appropriation under the laws of this State, for a period of three years from the date of said notice, at which time the proper officers of the United States shall file plans for the proposed works in the office of the State Engineer for his information, and no adverse claim to the use of the waters required in connection with such plans, initiated subsequent to the date of such notice, shall be recognized under the laws of the State, except as to such amount of the water described in such notice as may be formally released in writing by an officer of the United States, thereunto duly authorized; Provided, that in case of failure to file plans for the proposed work within the three years, as herein required, the water specified in the notice given by the United States to the State Engineer shall become public water, subject to general appropriation.[61]

The author interprets this statutory language to have the following legal consequences:

* From the date of proper notice, the United States has withdrawn "specified waters" from the prior appropriation system of stream water law in the State of Oklahoma. OWRB implements this withdrawal by rejecting any subsequent application seeking to

[61] Okla. Stat. Tit. 82 § 91 (1951).

appropriate withdrawn waters and returning the application with an explanation as to why OWRB rejected the application.[62]

* This withdrawal is effective for a period of three years, during which time the United States must file proposed plans for the use of the water in a federal water project.

* If the United States fails to file proposed plans within three years, the specified waters return to being public waters of the State that are subject to prior appropriation under State laws.

The author interprets Section 91 to allow the United States to withdraw stream water from the prior appropriation system as if the United States had filed an application for a prior appropriation under State water law. This withdrawal is a state-created protection of specified waters from competing applications for three years. This withdrawal is not a federal reserved water right for federal lands withdrawn from the public domain for primary or secondary federal purposes.[63] Moreover, the State conditioned the length of the withdrawal upon the United States filing project plans that describe the beneficial uses for the withdrawn water. If the United States did not fulfill the conditions set forth in the statute, the State of Oklahoma reclaimed the water for its prior appropriation system. The author does not interpret Section 91 to confer water rights upon anyone. Moreover, the author does not interpret Section 91 to identify who would have water rights if and when the United States complied with the Section 91 conditions. The author

[62] Okla. Admin. Code § 785: 20-1-8 (2014).

[63] For understanding of non-tribal federal reserved water rights, three leading cases are *Arizona v. California*, 373 U.S. 546 (1963); *Cappaert v. United States*, 426 U.S. 128 (1976); *United States v. New Mexico*, 438 U.S. 696 (1978).

concludes that the State of Oklahoma will confer water rights outside Section 91 under other Oklahoma statutes.

In 1959, the Oklahoma Legislature amended Section 91 to impose an additional condition that the United States must commence and continue construction of the filed plans within eight years of the filing of the plans.[64] The Bureau of Reclamation now had eleven years from the withdrawal notice to plan (3 years) and to begin construction (8 years) of the project for which the stream water was withdrawn. Even with this eleven-year time line, the 1959 statute also authorized the OWRB to extend the time of commencement of construction beyond eight years if doing so was in the best interest of the state[65] or if Reclamation faced delay due to a national emergency.[66]

In the same year 1959, the Oklahoma Legislature also adopted Title 82 § 97 that reads in part:

> Any waters heretofore ... or hereinafter withdrawn by the United States ... in the stream systems of the State shall be only those waters necessary for the plans filed for the projects [sic] economic justification and water supply. Any remaining portion of the waters of such stream system ... shall be subject to general appropriation as provided by State law; ..."[67]

In light of this Section 97, Oklahoma prescribed an express limit on the quantity of a United States withdrawal of stream water – that is, the "specified waters" in the withdrawal

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[64] Laws 1959, p. 373 § 1, codified at Okla. Stat. Tit. 82 § 91 (1959 Supp.) (Read the added "provided further" clause.]

[65] *Id*.

[66] Laws 1959, p. 374 § 3, codified at Okla. Stat. Tit. 82 § 98 (1959 Supp.).

[67] Laws 1959, p. 374 § 2, codified at Okla. Stat. Tit. 82 § 97 (1959 Supp.)

notice. Section 97 identifies that quantity as "only the waters necessary for the plans filed for the project's economic justification and water supply." By prescribing this quantity for a United States withdrawal, Oklahoma was applying a fundamental principle of prior appropriation law to United States withdrawals: beneficial use shall be the basis, the measure and the limit of the right to the use of water.[68] All remaining waters in the stream system, beyond those necessary for Reclamation project, remain subject to the general appropriation laws of the state of Oklahoma.

The author does not interpret Section 97 to confer water rights upon anyone and Section 97 does not identify who would have water rights if and when the United States complied with the Section 91 conditions about filing plans and beginning construction of the project.

In 1967 and 1972, the Oklahoma legislature further amended the statutes authorizing the United States to withdraw stream water from the prior appropriation system. In these 1967[69] and 1972[70] amendments, the Oklahoma legislature imposed additional procedural requirements upon the United States and the Oklahoma Water Resources Board before a withdrawal would be given legal effect. Prior to 1967, the United States gave a withdrawal notice that the OWRB simply recognized and effectuated. After 1967, the United States still had to give notice, but the OWRB then had additional duties of providing publication notification of the U.S. notice, hold a hearing on the U.S. notice, and make findings of fact and law that the U.S. withdrawal was in harmony

[68] Okla. Stat. Tit. 82 § 1 (1951). *See also*, the final 14 words of Section 8 of Reclamation Act, 43 U.S.C. § 372 (2018).

[69] Laws 1967, c. 391 § 5 (eff. May 23, 1967).

[70] Laws 1972, c. 256 § 29 (April 7, 1972).

with the best interests of the State of Oklahoma.[71] While the 1967 and 1972 amendments kept the 1959 limitation on the necessary quantity that the United States could withdraw,[72] the 1972 statute expressly empowered the OWRB to reduce the amount of the requested withdrawal and to attach conditions on the proposed withdrawal or to reject the withdrawal in its entirety.[73] The present Oklahoma statute authorizing a United States withdrawal is identical to the 1972 statute.[74]

In summary, Oklahoma law has always authorized the United States to withdraw stream water for Reclamation projects.[75] However, as the years went along, the Oklahoma legislature imposed greater and greater procedural obligations upon the United States before the withdrawal notice would have legal effect. Moreover, the Oklahoma legislature clarified the quantity of water that the United States could claim as "specified waters" in the withdrawal notice. But the withdrawal statutes never identified who had water rights in the withdrawn waters

The author will further discuss the meaning and implication of Oklahoma's statutes governing Reclamation withdrawals in the chapters of this legal review that discuss the specific legal and factual situations of each of the four Reclamation reservoirs. In-depth understanding of these Oklahoma statutes can best be articulated in the particulars of each Reservoir, rather than in

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[71] Okla. Stat. Tit. 82 § 91 (1970 Supp.).

[72] Okla. Stat. Tit. 82 § 91(b) (1970 Supp.); Oklahoma Stat. Tit. 82 § 105.29(B) (1980 Supp.).

[73] Okla. Stat. Tit. 82 § 105.29(A) (1980 Supp.).

[74] Okla. Stat. Tit. 82 § 105.29 (2011).

[75] Professor Rarick has a folksy and interesting discussion of the tensions between the United States and the State of Oklahoma regarding the withdrawal statute and its impact and implications for Oklahoma stream water law. J. Rarick, *Oklahoma Water Law, Stream and Surface under the 1963 Amendments*, 23 Okla. L. Rev. 19, 43-44 (1970).

a general background chapter. For example, the later chapters will discuss which Oklahoma statutes – the statues in effect at the date of withdrawal or statutes that became effective after the date of withdrawal – apply to the four Reclamation reservoirs.

Conservancy Districts and Rights to Water

The Oklahoma Legislature first created conservancy districts in the 1923-24 session.[76] Master Conservancy Districts (MCDs), created in 1955, are a type of conservancy district and operate generally under the same statutes as those applicable to other conservancy districts.[77] Moreover the Oklahoma Legislature expressly authorized MCDs to act as operational intermediaries between the Bureau of Reclamation and the ultimate end-users of project water.[78] In this intermediary role, MCDs could invoke Title 82 § 577 to claim water rights for the District. In 1961, § 577 read in part as follows:

> The rights of landowners, municipalities, corporations, and other users of water to the waters of the district for domestic use, water supply, industrial purposes, for water power, or for any other purposes shall extend only to such rights as were owned by them prior to the organization of the district, and to such use as could be made of such water if the improvements of the district had not been made. Wherever the organization of, or the improvements made by, the district make possible a greater, better, or more convenient use of, or benefit from, the waters of the district for any purpose, the right of such waters shall be the property of the district and such rights may be leased, sold, or assigned by the district.[79]

[76] Session Laws 1923-24, c. 139 § 25 (March 28, 1924).

[77] Okla. Stat. Tit. 82 §§ 541 & 541.1 (2011).

[78] Okla. Stat. Tit. 82 § 541.1 (2011).

[79] Okla. Stat. Tit. 82 § 577 ¶ 1 (1961).

While exercising its water rights, MCDs must act in a manner "to promote the welfare of the district."[80] To this author, this particular language indicates that the MCD acts as a fiduciary over its water rights for the benefit of the ultimate end-users, but the MCD is the owner of the water rights.

Anyone desiring to use the water of the Master Conservancy District must make application to the MCD stating the purpose and the character of use, the amount of water desired, the place of use, and the time period and degree of continuity of use. Upon receiving the application, the MCD may enter into contracts for the lease, purchase, or license to use the District's water.[81]

From 1967 until the present, the Oklahoma Legislature reduced § 577 to a simple sentence that states:

> The rights of conservancy districts, landowners, municipalities, corporations, and other users of water in conservancy districts shall be governed by the laws of the State of Oklahoma providing for the use of water.[82]

Under the present day Section 577, MCDs no longer are explicitly identified as the holders of the water rights for Reclamation projects. Despite this change to the language of § 577, the author concludes that MCDs have not lost any water rights they acquired under § 577 as worded from 1924 through 1967. MCDs do have the water rights in the waters of the district and may lease,

[80] Okla. Stat. Tit. 82 § 577 ¶ 3 (1961).

[81] Okla. Stat. Tit. 82 § 577 ¶ 4 (1961).

[82] Okla. Stat. Tit. 82 § 577 (2011).

sell, or license those water rights. Moreover, looking forward, MCDs are clearly entitled to apply for water rights under Oklahoma law just as any other Oklahoma applicant.

In 1963 when the Legislature adopted a new prior appropriation stream water law, the Legislature explicitly addressed the United States withdrawal of water as follows:

> Priorities based on the withdrawal of water by the United States pursuant to Section 91 of this title to the extent to which the priority has not been lost in whole or in part through non-utilization as provided by said Section [Section 91] or pursuant to Section 32 of this Title. Such said priorities shall vest in the users of said water as of date of notification given pursuant to Section 91 of this Title.[83]

The author understands this 1963 priority to have several distinctive features:

* The water rights accruing from Federal withdrawals belong to the "users of said water." These users include MCDs which, under Title 82 § 577, hold the water right to project waters and to other users of project water who had a water right that pre-existed the statutory organization of the particular MCD.

* The Bureau of Reclamation withdraws the water but does not have water rights in the project water.

* The priority date for project water is the date the United States notified the State of Oklahoma that the United States intended to withdraw specified waters for a future Bureau of Reclamation project.[84]

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[83] Okla. Stat. Tit. 82 § 1-A (1970 Supp.). This statutory language is identical to present day Okla. Stat. Tit. 82 § 105.2 (2011) except that the internal references have changed: § 91 is now § 105.29 and § 32 is now § 105.16 of Title 82 (2011).

[84] The Supreme Court of Oklahoma affirmed this priority date for Reclamation projects in an opinion that did not cite Okla. Stat. Tit. 82 § 1-A (1970 Supp.). *Oklahoma Water Resources Board v. Foss Reservoir Master Conservancy District*, 527 P.2d 162 (Okla. 1974). *See also, City of Stillwater v. Oklahoma Water Resources Board*, 524 P.2d 938 (Okla. Ct. App. 1974).

In summary, MCDs hold most of the water rights for water in their reservoirs while some end-users have water rights in project water that pre-dates the existence of a particular MCD. MCDs control the water distributed to most end-users through contracts for the supply of water based on end-users requests to the MCDs. Most end-users of water in Reclamation reservoirs have contract rights to water based on contracts with the MCDs and nothing more. Most end-users do not have state-created water rights.

Excess or Surplus Waters in Reservoirs

Just as Reclamation laws recognized that Reclamation projects may impound water in excess of the waters specifically identified to project end-users,[85] so too Oklahoma law has long recognized the concept of "excess waters" within various reservoirs, including Reclamation reservoirs. From statehood through 1963, two Oklahoma statutes expressly addressed "excess water" – Okla. Stat. Tit. 82 § 21 and § 101 (1961).

Tit. 82 § 21 (1961) read in part as follows:

> ... The owners of works proposing to store or carry water in excess of their needs for beneficial use, may make application for such excess, and shall be held as trustees of such right for the parties applying the water to a beneficial use; and shall be required to furnish the water for such parties at reasonable rates for storage, or carriage, or both, as the case may be.

When the Oklahoma Legislature passed the new stream water laws in 1963, the Legislature repealed the language just quoted from § 21 (1961).[86]

[85] Act of February 21, 1911, ch. 141, 36 Stat. 925, codified at 43 U.S.C. § 523-525 (known as the Warren Act).

[86] Compare the language of Okla. Stat. Tit. 82 § 21 (1961) with the language of Okla. Stat. Tit. 82 § 21 (1970 Supp.).

From statehood through 1963, Okla. Stat. Tit. 82 § 101 (1961) overlapped with the just quoted § 21 (1961) and read as follows:

> The owner of any works for the storage, diversion or carriage of water, which contain water in excess of his needs for irrigation or other beneficial use for which it has been appropriated, shall be required to deliver such surplus, at reasonable rates for storage, or carriage, or both, as the case may be, to the parties entitled to the use of the water for beneficial purposes. In case of the refusal of such owner, to deliver any such surplus water at reasonable rates as determined by the State Engineer,[87] he may be compelled to do so by the district court for the county in which the surplus water is to be used.

In 1972, the Oklahoma Legislature renumbered Okla. Stat. Tit. 82 § 101 (1961) as Okla. Stat. Tit. 82 § 105.21. As renumbered, Okla. Stat. Tit. 82 § 105.21 is current law in 2021.

Reading the pre-1963 § 21 and the current § 105.21, the author interprets these statutes to create the following Oklahoma water rights:

* Reclamation projects may impound waters in excess of those specifically designated for project end-users. Reclamation projects have a storage right over these excess waters, but not an ownership right in these excess water.[88] Although the statutory language describing Reclamation projects as trustees over the excess waters for the public was repealed in 1963, the author believes that Reclamation projects do act in a fiduciary manner for the public with regards to the excess waters impounded in the reservoirs.[89]

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[87] After 1957, the Oklahoma Water Resources Board acquired all the powers and duties of the State Engineer.

[88] Okla. Admin. Code § 785: 20-1-9 **Use of water from a reservoir** (2014).

[89] The author also notes Okla. Stat. Tit. 82 § 489 (1971) that apparently declared all water in conservancy reservoirs, including Master Conservancy District reservoirs, as public waters to which the public has a right of access subject to the public water being appropriated for beneficial use. The Oklahoma Legislature enacted § 489 in 1935. Laws 1935, p. 349 § 12. The Legislature repealed § 489 in 1972. Laws 1972, c. 253, § 19.

* Oklahoma considers the excess waters in reservoirs to be public stream waters of the state. Oklahoma can grant rights of prior appropriation to these excess waters to applicants under the general stream water laws of the State.[90] The United States does not have an ownership right in the excess water.[91]

* Once OWRB grants an applicant a prior appropriation for a beneficial use in the excess waters, the applicant must reach an agreement with the owner/operator of the reservoir for "reasonable rates" for storage or carriage, or both. If the applicant and the owner/operator of the reservoir cannot reach agreement, the Oklahoma district court where the excess water will be used can resolve the dispute about "reasonable rates." Both the Oklahoma Court of Appeals[92] and an Attorney General Opinion[93] have affirmed this third interpretation of Okla. Stat. Tit. 82 § 105.21.

* The Bureau of Reclamation acts through intermediary entities in dealing with end-uses of project water.[94] Thus, the Master Conservancy Districts and the Lugert-Altus Irrigation District exercise control over the excess waters in the reservoirs. The MCDs and the Irrigation

[90] Okla. Att'y Gen. Op. # 71-280 (Dec. 30, 1971). (final paragraph). *See also*, Okla. Admin. Code §§ 785: 20-1-9 and 785: 20-5-5(b) (2014).

[91] *Cf., Wagoner Rural Water District No. 2 v. Grand River Dam Authority*, 2010 OK CIV APP 95, 241 P.3d 1132 at ¶¶ 12-13.

[92] *Rural Water, Sewer and Waste Management District No. 1, Logan County v. City of Guthrie,* 2014 OK CIV APP 48, 325 P.3d 1 at ¶¶ 6-7.

[93] Okla. Att'y Gen. Op. # 71-280 (Dec. 30, 1971). (final paragraph).

[94] R. Benson, *supra* note 14 in this chapter at pp. 387-389.

District enter into contracts with the end-users having a prior appropriation for beneficial use in the excess waters, as established under Oklahoma stream water law.

Beneficial Use[95]

Beneficial Use is the basis, the measure, and the limit of the right to use stream water in Oklahoma.[96] Beneficial use, along with priority of water rights based on first-in-time is first-in-right,[97] is a foundational principle of the prior appropriation system of water law. However, Oklahoma statutes have never defined the term "beneficial use." Rather, the Oklahoma Water Resources Board has defined the term "beneficial use" through its regulations.

> In 1973, the OWRB defined "beneficial use" as:
>
> [T]he use of such quantity of water when reasonable intelligence and reasonable diligence are exercised in its application for a lawful purpose, as is economically necessary for that purpose. Beneficial uses include but are not limited to municipal, industrial, irrigation, recreation, fish and wildlife, etc."[98]

The current definition of "beneficial use" reads the same with the addition of the words "stream or ground" modifying the noun "water."[99]

Enforcement of Stream Water Rights

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[95] For a thorough review of beneficial use in Oklahoma, D. Couch & C. Klaver, *Beneficial Use in Oklahoma Water Law: Opportunity for Better Management or More Mischief?*, 64 Okla. L. Rev. 615 (2012).

[96] Okla. Stat. Tit. 82 § 105.2(A) (2011).

[97] Okla. Sta. Tit. 82 § 105.2(B) (2011). This section lists seven priorities for the use of water and states that "no other [priorities] shall exist."

[98] Oklahoma Water Resources Board Rules and Regulations 300.1(o) (Publication 45, 1973).

[99] Okla. Admin. Code § 785:20-1-2 (2014). See also, Okla. Admin. Code § 785:20-1-5. **Purposes for a water appropriation** (2014).

When the Oklahoma Legislature enacted the 1963 stream water law, the Legislature listed seven uses of water for which the Oklahoma Water Resources Board was to establish priority dates. The Legislature also directed that no other priority aside from the listed seven shall exist.[100] In accordance with procedures prescribed by the Legislature,[101] the OWRB then conducted investigations and held hearings to prepare the list of holders of water rights and their priority dates for the various streams in Oklahoma. By 1972, the OWRB had generally completed these priority determinations and had assigned water rights under the prior appropriation system to users of stream water.[102] Once OWRB had rendered priority determinations, these priority determinations became vested stream water rights under Oklahoma water law.

In 1972, the Legislature repealed the procedures for determining priority and directed that thereafter the OWRB would have the discretionary authority to institute a general stream water adjudication[103] if it were in "the best interests of the claimants to the use of water from a stream system."[104] If invoked by the OWRB, general stream water adjudications, giving rise to a judicial decree, would be another way of acquiring vested stream water rights under Oklahoma water law.

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[100] Okla. Stat. Tit. 82 § 1-A(b) (1970 Supp.), now codified as 82 Okla. Stat. § 105.2 (2011).

[101] Okla. Stat. Tit. 82 §§ 5-6 (1970 Supp.), repealed by Laws 1972 c. 356 § 33.

[102] *See*, *Talley v Carley*, 1976 OK 1, 551 P.2d 248.

[103] Laws 1972, c. 256 §§ 6-8, now codified at Okla. Stat. Tit. 82 §§ 105.6-105.8 (2011).

[104] Okla. Stat. Tit. 82 § 105.6 (2011).

The Oklahoma Water Resources Board has the authority to take enforcement action for violations of the stream water law as follows:

> The unauthorized use of water ... shall be a misdemeanor and each day such violation continues shall be a separate violation. In addition to filing a criminal complaint and any other remedies provided herein, the Board shall have the right to bring an action in the district court of the county where in such act or omission occurs to enjoin the same. ..."[105]

Interfering with the water rights of a senior priority holder should be a statutory violation as an unauthorized use of water – usually by a junior appropriator taking water out-of-priority ahead of a senior appropriator. A senior water rights holder, feeling aggrieved, can activate § 105.20 by filing a complaint with the OWRB which initiates an investigation and requires the OWRB to respond as to the appropriate action to take.[106] As § 105.20 indicates, OWRB's appropriate action can be a criminal complaint, a civil action for an injunction, or both.

Aside from Okla. Stat. Tit 82 § 105.20, Oklahoma statutes do not set forth any specific statutory authority for the OWRB to be proactive in protecting an individual claimant's water rights from interference by others. For years from statehood, Oklahoma statutes did provide for watermasters to apportion, regulate and control waters of streams.[107] Apparently these watermaster statutes never had practical application in Oklahoma water law. In 1972, the Legislature repealed the watermaster statutes.[108] Today, there are no watermasters in Oklahoma.

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[105] Okla. Stat. Tit. 82 § 105.20 (2011). The final sentence to § 105.20 reads in part: "The Board ... shall have the duty to file complaints of violations of the penal provisions of this section."

[106] Okla. Admin. Code § 785:1-11-1 (2014).

[107] Okla. Stat. Tit. 82 §§ 72-75 (1961).

[108] Laws 1972, c. 256 § 33.

However, the Legislature has granted OWRB extensive authority over the waters of the state of Oklahoma. More particularly, Okla. Stat. Tit. 82 § 1085.2(8) reads in part as follows:

> To institute and maintain ... any actions or proceedings in or before any ... board ... of this ... state ... to stop or prevent any use, misuse, appropriation or taking of any of the waters of the state which is in whole or in part in violation of any law, or any rules, orders, judgments or decrees of any ... board ... of this ... state ..."

Furthermore, § 1085.2 in subsections (1) and (7), the Legislature gave OWRB the authority to do all things necessary, proper, or expedient or to promulgate all rules or orders necessary or convenient for the exercise of its powers or the performance of its duties. Just as OWRB has created a complaint evaluation and resolution procedure,[109] § 1085.2(1),(7) & (8) gives the OWRB authority to create an administrative enforcement procedure to protect senior priority rights in stream water. OWRB could create an administrative procedure to stop or prevent interference with senior priority rights or to prevent out-of-priority use of water rights. Section 1085.2(1),(7) &(8) gives the OWRB authority to protect its own orders and issued permits setting the priority rights to use stream water in Oklahoma.

In addition to priority determinations, general stream adjudications, and OWRB actions on violations, an individual claimant to water rights may bring suit against any other person or entity whose acts are impairing that claimant's water right. However, an individual claimant can bring this suit only if the individual claimant holds a water right established in accord with the Oklahoma prior appropriation stream water law.[110]

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[109] Okla. Admin. Code § 785: 1-11-1 (2014).

[110] Laws 1963, c. 207 § 3, now codified at Okla. Stat. Tit. 82 § 105.5 (2011).

In summary, holders of water rights in Reclamation reservoirs have an established priority date for their water rights. These holders can complain to the OWRB to seek OWRB action to protect the holder's water right. These holders can bring individual law suits to protect their water right from interference. What is lacking in the statutes, the regulations, and the case law is any definition of interference or any identification of triggers that can be invoked to protect the water rights of senior holders.[111]

Moreover, when considering an application for a water permit, OWRB has the statutory obligation to determine that unappropriated water is available to the applicant and that the applicant's proposed use will not interfere with existing appropriative uses.[112] In its regulations, OWRB has provided more detailed language about the information OWRB considers in making its determinations about the existence of unappropriated waters and whether interference will occur.[113] Specific factors listed in the § 785: 20-5-5 include the following: mean annual precipitation run-off in the watershed above the point of diversion, mean annual flow of the stream, stream gauge measurements, domestic uses, existing appropriations, other designated purposes (*e.g.*, Interstate Compact obligation), dependable yield from a reservoir or pond, and Board review of proposed present and future needs. Indeed, these factors in the regulatory language, including the Board's power to impose conditions and restrictions in the permit itself,

[111] In later chapters of this report that address the water rights in each of the four Reclamation reservoirs, the author will discuss the definition of interference and possible triggers to protect water rights that may fit the legal context of each reservoir.

[112] Okla. Stat. Tit. 82 § 105.12.(A)(1)&(3) (2011). *But see*, Okla. Stat. Tit. 82 § 105.13 (2011) authorizing seasonal, temporary, term or provisional temporary permits even when no unappropriated water exists for regular permits. OWRB's authority in § 105.13 is discretionary.

[113] Okla. Admin. Code § 785: 20-5-5 (2014).

can be read as triggers for finding interference between senior and junior water rights in Oklahoma stream water.[114]

Post-Application Obligations for the Use of Stream Water

In the prior appropriation system, a phrase commonly used is that the person with a water right must use the water or lose it. Okla. Stat. Tit. 82 § 105.17 expresses this "use it or lose it" philosophy by explicitly stating that if a permit holder does not use the full amount authorized, "... that amount not so used shall be forfeited ... and shall become public water and available for appropriation."[115] Furthermore, § 105.17 also states that if the permit holder does not beneficially use the water for the purpose for which appropriated for seven continuous years, the water reverts to the public as unappropriated water.[116]

In addition, Oklahoma water law sets a general standard that any person gaining a stream water permit must put the whole amount of the authorized permit to beneficial use within seven years.[117] In situations where the permit holder is engaged in a long-term project for the use of water, the Oklahoma statute authorizes the OWRB to act as follows:

> If, upon evidence presented to the Board, and considering the present and future needs of the stream system of origin, it appears that the proposed project, improvement or structure will promote the optimal beneficial use of water in the state, and it further appears that the total amount of water to be authorized by the

[114] *But see*, Okla. Admin. Code § 785: 20-5-5(d)(3) (2014) creating a presumption that interference will not occur if the rights-holder complies with the permit granted by the Board. The author interprets this presumption to mean that a dispute about interference will usually be a dispute about whether the rights-holder, who is accused of interference, is in fact in compliance with its permit. But, of course, § 785: 20-5-5(d)(3) is only a presumption and not a conclusive finding of non-interference.

[115] Okla. Stat. Tit. 82 § 105.17(A) (2011).

[116] Okla. Stat. Tit. 82 § 105.17(B) (2011).

[117] Okla. Stat. Tit. 82 § 105.16(A) (2011).

> permit cannot be put to beneficial use within seven (7) years, then the Board shall provide in the permit the time within which the total amount to be authorized shall be put to beneficial use. This time shall be the useful life of the proposed project, improvement or structure as found by the Board. In order to insure orderly progress toward beneficial utilization within the said time set by the Board, the Board shall provide in the permit a schedule of times within which certain percentages of the total amount to be authorized must be put to beneficial use.[118]

As the four Reclamation reservoirs are engaged in long-term water projects, the OWRB has established a schedule of times for several projects – that is, a schedule of times by which the MCDs must use specific percentages of water authorized in the appropriation permits approved by OWRB.[119] By complying with the OWRB schedule of times, the MCDs will not face the possible loss of water rights for nonuse.[120]

Ground water defined

Okla. Stat. Tit. 60 § 60 is the fundamental law for understanding water rights to groundwater in Oklahoma. In 1963, when the Legislature adopted the prior appropriation stream water law, the Legislature also amended Tit. 60 § 60 to read in part as follows:

> The owner of the land owns water standing thereon or flowing over or under its surface but not forming a definite stream. *The use of ground water shall be governed by the Oklahoma Ground Water Law*. Water running in a definite stream, formed by nature over or under the surface, may be used by him *for domestic purposes as defined [in Tit. 82 § 1-A 1970 Supp.]*, as long as it remains there, but he may not prevent the natural flow of the stream or of the natural spring from which it commences its definite course, nor pursue nor pollute the

[118] Okla. Stat. Tit. 82 § 105.16(B) (2011).

[119] Chapters in this report that discuss the specific water rights of each Reclamation project will further explore the implications of OWRB's schedule of times for use of project water.

[120] Okla. Stat. Tit. 82 § 105.18 **Loss of right to use water – Notice – Hearing** (2011).

> same, *as such water then becomes public water and is subject to appropriation for the benefit and welfare of the people of the State as governed by law; ...*[121]

The quoted language in italics is the language the Legislature added to Tit. 60 § 60 in 1963.

The author understands the 1963 amendments to Tit. 60 § 60, as quoted, to clarify Oklahoma water law in two distinct ways:

* Water in definite streams is public water and is subject to the prior appropriation stream water law enacted in 1963. However, the Legislature did not define the term "definite stream" in 1963.

* Water under the surface but not in a definite steam is governed by the Oklahoma Ground Water Law that had been enacted in 1949. Reading the Ground Water Law, the Legislature defined groundwater as:

> In this [1949 Groundwater Law] ..., the term "ground water" shall mean water under the surface of the earth regardless of the geologic structure in which it is standing or moving; it does not include water flowing in underground streams with ascertainable beds and banks.[122]

The author concludes that an implication from this definition of groundwater is that an underground definite stream must have "ascertainable beds and banks."

In 1972, the Legislature amended the prior appropriation steam water law and, for the first time, included a definition of "definite stream" that read as follows:

> "Definite Stream" means a watercourse in a definite, natural channel, with defined beds and banks, originating from a definite source or sources of supply.

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[121] Okla. Stat. Tit. 60 § 60 (1970 Supp.).

[122] Okla. Stat. Tit. 82 § 1002 (1949 Supp.).

> The stream may flow intermittently or at irregular intervals if that is characteristic of the sources of supply in the area.[123]

This is the current definition of the term "definite stream."[124]

In 1967, the Legislature amended the 1949 groundwater definition by deleting the clause "it does not include water flowing in underground streams with ascertainable beds and banks."[125] And then in 1972, the Legislature again amended the definition of groundwater to read as follows:

> ... the term "Ground Water" shall mean water under the surface of the earth regardless of the geologic structure in which it is standing or moving outside the cut bank of any definition stream.[126]

This is the current definition of the term "groundwater."[127]

The importance of this careful attention to Title 60 § 60 and the various Legislative actions in defining the terms "definite stream" and "groundwater" is the goal of understanding Oklahoma law with regard to distinguishing groundwater from stream water. Groundwater is owned by the overlying landowners and accessed through the groundwater law. Stream water is public water accessed by the public for beneficial use through prior appropriation. To be more precise, the issue is whether alluvial waters – i.e. waters in alluvial aquifers – are groundwater or stream waters.

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[123] Laws 1972, c. 256 § 1 (eff. July 1, 1973).

[124] Okla. Stat. Tit. 82 § 105.1 (2011).

[125] Laws 1967, c. 391 § 6 (eff. May 23, 1967).

[126] Laws 1972, c. 248 § 1 (eff. July 1, 1973).

[127] Okla. Stat. Tit. 82 § 1020.1 (2011).

The Supreme Court of Oklahoma has twice decided cases that clearly presented facts and the legal issue as to classifying the water in dispute as groundwater or stream water.

In *Oklahoma Water Resources Board v. City of Lawton*,[128] the Supreme Court ruled that an applicant who sought to encase a spring as it emerged to form a definite stream was attempting to appropriate stream water, as opposed to attempting to access his groundwater through a well. The Supreme Court treated the spring as the definite source of a definite stream. To quote the language of the Court:

> In construing the language [of Tit. 82 § 105.1(A) and Tit. 60 § 60], we do not think it was the intent of the Legislature to allow a natural spring, which is the source of a definite stream, to be diverted and put to private, rather than public use, merely because the spring water may, for a short distance before constituting a definite stream, run across the surface in a nondefinite stream. ... The test is not how immediately spring water forms a definite stream, but rather, whether the spring water forms a definite stream. If it forms a definite stream, it is public water from its inception and may not be diverted for private use unless appropriated as stream water. ... [W]e hold that when natural spring water forms a definite stream, the water in the stream and the spring itself, from its inception, is to be classified as stream water and appropriated as such. ...[129]

In *Messer-Bowers Co. v. Oklahoma Water Resources Board*,[130] the Oklahoma Supreme Court ruled that an applicant seeking to drill wells into land within one mile of the North Canadian River was taking groundwater subject to the Oklahoma Groundwater Law. The Court so ruled even though neighboring landowners argued that the wells would makes springs, that flow to definite streams, go dry. The Court ruled:

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[128] 1977 OK 89, 580 P.2d 510.

[129] 580 P.2d at 513.

[130] 2000 OK 54, 8 P.3d 877.

> "The Water Board properly determined that the groundwater statutes apply. ... [W]hen the groundwater surfaces as a spring and forms a stream, it is at that point that the stream water statutes apply."[131]

Although the Oklahoma Supreme Court did not cite the Tit. 82 § 1020.1 definition of groundwater in *Messer-Bowers*, based on the facts and the ruling, the Court arguably has determined that alluvial water in alluvial aquifers is groundwater until the water surfaces as springs serving as a definite source of a definite stream or until the water seeps into a definite stream. Moreover, the OWRB has long applied the Oklahoma Groundwater Law to alluvial aquifers. The OWRB has issued several maximum annual yield and equal proportionate share determinations for identified alluvial aquifers.[132]

Yet there may be viable legal arguments that alluvial aquifers are stream water for two different and independent reasons.

First, the Supreme Court of Oklahoma has never addressed the legal impact of the 1967 Legislative amendment to Okla. Stat. Tit. 82 § 1002 that deleted the phrase "it does not include water flowing in underground streams with ascertainable beds and banks" from the definition of groundwater. Professor Rarick considered this amendment to have considerable impact. He wrote, "Water moving in the alluvium along streams for example was changed by this amendment from stream water available for public appropriation in general to ground water available only to overlying land owners and their lessees."[133]

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[131] 8 P.3d at 880.

[132] OWRB, Maximum Annual Yield Fact Sheet: Major Basins with Final Order (n.d.), available at https://www.owrb.ok.gov/about/about_pdf/Fact-MAY.pdf

[133] J. Rarick. *Oklahoma Water Law, Ground or Percolating, in the Pre-1971 Period*, 24 Okla. L. Rev. 403, 424 (1971).

Professor Rarick's comment potentially poses several legal questions:

Definition Questions: Are alluvial aquifers, and their related terrace aquifers, aquifers that are "flowing in underground streams with ascertainable beds and banks?" Or, are the alluvial aquifers outside the ascertainable beds and banks of an underground stream? In other words, what is an "underground stream?" For purposes of Oklahoma water law, is an "underground stream" the same as a "definite stream" which requires "cut beds and banks?" As far as the author knows, no caselaw exists on these questions and, additionally, no significant discussion of these questions exists in legal treatises or law review articles.

Policy Questions: Even assuming that alluvial aquifers are "flowing in underground streams with ascertainable beds and banks," does the Legislature of the State of Oklahoma have the constitutional authority to change a public resource into a private resource – that is, to change public water into water owned privately by the overlying landowners? This precise question has never arisen within the caselaw or the legal literature about Oklahoma water law.[134]

Second, the Supreme Court has never addressed the hydrological distinction between gaining streams and losing streams. A gaining streams gains water from its alluvial aquifer as if it is drawing groundwater into its defined bed and banks. The facts of the *Messer-Bowers*

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[134] To this author's mind, without any pretense of an in-depth discussion, this policy question potentially raises the concept of "public trust." Several states in the western United States, particularly the State of California, have adopted and developed the concept of the public trust in state water law. For a recent case from a western state, *see*, *Mineral County v. Lyon County*, 473 P.3d 418 (Nev. 2020). The Nevada Supreme Court ruled that the public trust doctrine does not permit the reallocation of water rights already adjudicated and settled under the doctrine of prior appropriation.
Neither the Oklahoma Legislature nor Courts have adopted the concept of the public trust in Oklahoma water law. *Cf.,* D. Couch & C. Klaver, *Beneficial Use in Oklahoma Water Law: Opportunity for Better Management or More Mischief?,* 64 Okla. L. Rev. 615, 651 (2012) (discussing the concept of "public interest" in Oklahoma water law.)

decision appears to indicate that the stream was a gaining stream. By contrast, a losing stream is a steam that loses water to the surrounding alluvial aquifer. If a landowners near a **losing** stream uses a well to take alluvial water, it could be argued that the landowner is taking stream water through the groundwater well. Thus, arguably, on losing steams (or stream segments) the landowner must have a stream water prior appropriation permit, rather than a groundwater permit. The author thinks that fuller discussion of this distinction between gaining streams and losing steams should take place in the chapters addressing the waters of the four Reclamation reservoirs. The rivers and streams of the catchment basins of the four reservoirs each have their own distinct hydrology.

Redetermination of MAY and EPS in Groundwater Basins

OWRB determines the maximum annual yield (MAY) of groundwater basins after conducting hydrological surveys and investigations, issuing a tentative determination of an MAY, and holding a hearing before rendering a final MAY determination.[135] After the final MAY determination, OWRB then allocates an equal proportionate share (EPS) to each acre of land overlying the groundwater basin.[136]

The Legislature commanded OWRB to undertake a review and update the hydrological surveys at least every twenty years.[137] However, despite this twenty-year hydrological review and update, the Legislature then limited the OWRB to increasing the EPS for landowners, but

[135] Okla. Stat. Tit. 82 §§ 1020.4-1020.6 (2011).

[136] Okla. Stat. Tit. 82 § 1020.6(C) (2011).

[137] Okla. Stat. Tit. 82 § 1020.4(C) (2011).

not decreasing the EPS, even if the new data resulted in a lower MAY.[138] In 2018, the Legislature expanded OWRB's power in using the new updated information to allow as follows:

> The Board may, in subsequent basin or subbasin hearings, and after additional hydrologic surveys, increase the amount of water but shall not decrease the amount of water allocated *by regular permit issued prior to the completion of the of the additional hydrologic surveys.*[139]

The author interprets the 2018 amendment to mean that the OWRB can now set a smaller EPS for those landowners who apply for a new groundwater permit after a twenty-year review and update has established a decreased MAY in the groundwater basin. The author also interprets the 2018 amendment to mean that once a landowner receives a groundwater permit for a determined EPS, the landowner has a vested right in that groundwater permit that cannot be reduced by later OWRB hydrological surveys and updates. The author further explores the implications of his interpretations in the chapters addressing the water rights of the four Reclamation reservoirs.

Water for 2060

Reacting to the 2012 Update of the Oklahoma Comprehensive Water Plan, the Legislature set the public policy for water usage as follows:

> ... [T]he public policy of this state is to establish and work toward a goal of consuming no more fresh water in the year 2060 than is consumed statewide in the year 2012, while continuing to grow the population and economy of the state and to achieve this goal through utilizing existing water supplies more efficiently and expanding the use of alternatives ... Provided, however, that nothing in the Water for 2060 Act shall be

[138] Okla. Stat. Tit. 82 § 1020.6(D) (2011).

[139] Okla. Stat. Tit. 82 § 1020.6(D) (2018 Supp.) The italicized language is the amending language enacted in 2018. Amendment effective November 1, 2018.

construed as amending the provisions of law pertaining to rights or permits to use water.[140]

This Water for 2060 statutory provision sets only a goal as state policy, rather than a mandate for state policy. Even as a goal, however, the author interprets this legislatively declared state policy as allowing the OWRB to make decisions with an emphasis on conservation so as to achieve the goal – no more consumed fresh water in the year 2060 than is consumed in the year 2012. The author explores the implications of an OWRB conservation approach to the management of water, water rights, and permits upon each of the four Reclamation reservoirs in the following chapters of this report.

Master Conservancy Districts and Future Water Rights

Title 82 § 577 decrees that Master Conservancy Districts (MCDs) receive, hold, and exercise water rights just as any other water-rights holder (landowners, municipalities, corporations, etc.) under the laws of the State of Oklahoma.[141] Therefore, MCDs apply for additional water rights,[142] hold permits for water rights,[143] and transfer or assign water rights[144]

[140] Okla. Stat. Tit. 82 §1088.12 (2013 Supp.).

[141] Okla. Stat. Tit. 82 § 577 is set forth in full in the text in this chapter at fn. 82 above. For a fuller discussion of the history of § 577, read the text accompanying fns.76-82 in this chapter.

[142] Okla. Stat. Tit. 82 §§ 105.9-105.12 (stream water applications) and Tit. 82 §§ 1020.7-1020.9 (groundwater applications) (2011).

[143] Okla. Stat. Tit. 82 §§ 105.13-105.14 (types of permits and permit approval/denial) [stream water] (2011); Tit. 82 §§ 1020.10-1020.11 (types of permits), § 1020.12 (report of usage), § 1020.15 (prohibition on waste) [groundwater statutes] (2011).

[144] Okla. Stat. Tit. 82 §§ 105.22-105.24 (stream water] (2011). As groundwater belongs to the overlying landowners in an equal proportionate share (EPS), there are no Oklahoma water law statutes relating to the transfer, severance, or assignment of groundwater rights. *But cf.,* Okla. Admin. Code Ch. 30 **Taking and Use of Groundwater**, Subchapter 7 **Amendments to Groundwater Permits** (2014).

in accord with the general water law statutes and regulations governing stream water and groundwater of Oklahoma. Each of the four reservoirs obviously must think of themselves as intertwined with the federal laws and regulations related to the Bureau of Reclamation. But each of the four reservoirs should also think of themselves as entities that can seek and assert water rights under Oklahoma water law. The implications and opportunities of being treated like any other water-rights holder will be more fully explored in the chapters specifically focused on each of the four reservoirs.

Interstate Compact

In 1979, the State of Oklahoma entered into an Interstate Compact with the States of Texas, Arkansas and Louisiana about the Red River – called the Red River Compact.[145] The four Reclamation reservoirs discussed in this report capture the water of the Washita River (Foss Reservoir) and its tributaries (Fort Cobb Reservoir) or the water of the North Fork of the Red River (W.C. Austin Reservoir) and its tributaries (Tom Steed Reservoir). As these rivers and streams are part of the Red River Basin, the Red River Compact expressly applies and potentially has impact on the water rights of the four reservoirs.

Two purposes of the Red River Compact are explicitly relevant to water rights – the equitable apportionment of the Red River and its tributaries and the state and joint-state planning and actions related to each state's share of the interstate water of the Red River Basin.[146] The

[145] Okla. Stat. §§ 1431-1432 (2011) (Red River Compact is printed in full). The federal Congress must consent to Interstate Compacts and, by consenting, the Compact becomes federal law with the accompanying supremacy of federal law over state law. Red River Compact, Art. XIII § 13.03. For a brief discussion of Interstate Compacts, J. Novak & R. Rotunda, Constitutional Law § 9.5 (8th Ed. 2010).

[146] Red River Compact, Art. I § 1.01(b)&(e).

author will explore how the Red River Compact affects the water rights of each reservoir in the following chapters specific to each one.

WESTERN WATER LAW

Although water law exists and is important in every state of the United States, water law is a more prominent area of law and legal practice in the seventeen most western states of the United States. Oklahoma is one of these seventeen western states.

These seventeen states, from the central plains of the Dakotas south to Texas (including Oklahoma) and west to the Pacific Ocean states, have adopted the prior appropriation system of water law for stream water either exclusively or as a dual system of stream water law combining, in some fashion, riparian water law with prior appropriation. As previously indicated in this Chapter, Oklahoma has a dual system of stream water law with unresolved issues creating confusion and tension between riparian water rights and prior appropriative rights as of 2021.

As regards stream water, the Oklahoma prior appropriation system obviously has its own statutes, case decisions, regulations, and policies that are unique to the Oklahoma context. Yet, in its fundamental principles and concepts, the Oklahoma prior appropriation system is very similar to the prior appropriation systems of stream water law in the other western states. Thus, it is proper to look to the law of these western states as a source of ideas and as a source of secondary legal authority. In general, Oklahoma stream water law and western stream water law have significant overlap.

As regards groundwater, unlike stream water, the seventeen states of the western United States do not share a common legal system for the governance of groundwater – either in terms

of the rights in groundwater or in terms of the management institutions that govern groundwater. Moreover, Oklahoma groundwater law is, in this author's opinion, a unique system of groundwater rights allocation based on ownership of the groundwater by the landowner whose land overlies the aquifer. For these reasons, looking to the groundwater law of the western states for secondary authority to assist in the resolution of Oklahoma groundwater legal issues will rarely be proper. While groundwater law from the western states may be a source of concepts for consideration, Oklahoma policymakers would have to decide, consciously and explicitly, to adopt and to adapt these concepts to Oklahoma groundwater law. In general, western groundwater law and Oklahoma groundwater law do not overlap.

With this brief general comparison of western water law to Oklahoma water law, this report turns to discuss water law concepts from western water law that may serve as background law for purposes of a fuller understanding of the water rights of the four Reclamation reservoirs.

Conjunctive Water Management

In a technical memorandum,[147] the OWRB defined conjunctive water management as:

> The management of hydraulically connected surface water and groundwater resources such that the total benefits of integrated management exceed the sum of the benefits that would result from an independent management of each water resource.[148]

[147] OWRB, Oklahoma Comprehensive Water Plan – Technical Memorandum: Conjunctive Water Management in Oklahoma and Other States (Nov. 2010). (Technical Memorandum: Conjunctive Water Management)

[148] Technical Memorandum: Conjunctive Water Management at p. 2. Appendix A of the Technical Memorandum gives examples of eight alternative definitions of the term.

The Technical Memorandum then states that conjunctive management may be useful for seven listed purposes, including "provide a sustainable and reliable water supply" and "protect senior water rights."[149] Conjunctive water management is often called "conjunctive use."

The Hazard-Shively study of conjunctive management in western water law, excluding the six central plains states, concluded that nine of the eleven most western states had adopted conjunctive management practices in their respective state water law.[150] The Hazard-Shively study provides a careful discussion of the quite varied approaches to conjunctive management in these states. In the Oklahoma Technical Memorandum, OWRB surveyed the conjunctive management practices of Oklahoma and seven other states (Texas, Kansas, Nebraska, Colorado, Utah, California, Oregon). Table 1 of the Technical Memorandum provides a comparison of these eight states' comparative management practices.[151] For this report, the importance of the Hazard-Shively study, the Oklahoma Technical Memorandum and similar studies[152] is to be found in learning from the experiences of other states and in better understanding the concept of conjunctive water management. This learning and understanding will be put to use in the chapters in this report that address the specific factual and legal situations of each of the four Reclamation reservoirs.

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[149] Technical Memorandum: Conjunctive Water Management at p. 2.

[150] J. Hazard & D. Shively, *Conjunctive Management of Surface and Ground Water Resources in the Western United States* (Univ. of Montana, February 24, 2011) (copy in author's files).

[151] Technical Memorandum: Conjunctive Water Management at p. 15.

[152] E.g., T. Luke, *Idaho Conjunctive Management Rules & Ground Water District Formation* (Idaho Dept. Water Resources, March 7, 2014) (PowerPoint in author's files); F. Ogden & M. Harm-Benson, *Integrated Management of Groundwater and Surface Water Resources: Investigation of Different Management Strategies and Testing in a Modeling Framework* (April 10, 2010) (copy in author's files).

Turning back to Oklahoma water law, OWRB has correctly stated in its Technical Memorandum: "With the exception of the Arbuckle-Simpson aquifer, conjunctive management of supplies is not mandated under Oklahoma water law."[153] Not only is there no mandate, but the author could find no statutory authority allowing OWRB to adopt conjunctive water management outside the Arbucke-Simpson aquifer.[154] Therefore, OWRB manages the Oklahoma stream water law and the Oklahoma groundwater law as separate, independent water law systems.

As regards the Arbuckle-Simpson aquifer, the Legislature mandated that OWRB set a maximum annual yield (MAY) that "will not reduce the natural flow of water from springs or streams emanating from the [aquifer]."[155] In addition, the Legislature mandated that, before issuing a regular permit to an applicant, OWRB must find that "the proposed use is not likely to degrade or interfere with springs or streams emanating in whole or in part from [the Arbuckle-Simpson aquifer]."[156]

In light of the legislative approach to the Arbuckle-Simpson aquifer, Professor Gary Allison has suggested that the Legislature amend the Arbuckle-Simpson statutes so as to apply to

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[153] Technical Memorandum: Conjunctive Water Management at p. 4.

[154] Okla. Stat. § 1020.5 **Determination of maximum annual yield** mandates that OWRB take into account certain factors in making the MAY determination. One factor is "The rate of recharge to the basin or subbasin and total discharge from the basis or subbasin." The author will discuss this statutory sentence in the specific chapters on the four Reclamation reservoirs. Depending on the hydrological interconnectedness of a stream and the groundwater aquifer, OWRB arguably may have some (unrecognized) authority to manage conjunctively a stream and an aquifer in light of the relevant permits held by a particular Reclamation reservoir.

[155] Okla. Stat. Tit. 82 § 1020.9A(B)(2) (2011).

[156] Okla. Stat. Tit. 82 § 1020.9(A)(2)(d) (2011).

all groundwater aquifers – i.e. that groundwater permits cannot interfere with springs or stream flow.[157] Professor Allison's suggestion is that the Legislature mandate conjunctive water management. Due to long-established Oklahoma groundwater law, Professor Allison's suggestion raises significant constitutional concerns about the taking of vested groundwater rights from the overlying landowners. Yet, when landowners challenged the Arbuckle-Simpson statutes on the constitutional takings ground, the Supreme Court of Oklahoma deferred on rendering a constitutional ruling while appearing to imply that a constitutional takings claim might not be successful.[158]

Without the Legislature expressly mandating conjunctive water management for Oklahoma, OWRB may have the authority indirectly to consider the hydrological interconnection between a groundwater aquifer and stream flows. As previously discussed, the Water for 2060 Act[159] sets as a goal that Oklahoma use no more fresh water in 2060 than Oklahoma used in 2012. This conservation goal allows OWRB to make groundwater maximum annual yield (MAY) and equal proportionate share (EPS) determinations with conservation in mind. By so doing, OWRB indirectly could take into account hydrological interconnections that favor stream flows. Less groundwater pumping likely means for many streams an improved stream water flow.[160]

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[157] G. Allison, *Oklahoma Water Rights: What Good Are They?*, 64 Okla. L. Rev. 469, 507-511 (2012).

[158] Jacobs Ranch L.L.C. v. Smith, 2006 OK 34, 148 P.3d 842.

[159] Okla. Stat. Tit. 82 § 1088.12 (2013 Supp.).

[160] It is an interesting aside that Oklahoma only has only one Reclamation irrigation water project – Lugert-Altus Irrigation District. The other three Reclamation projects of this report do not have affiliated irrigation districts. A plausible reason why Foss, Fort Cobb, and Tom Steed do not have an irrigation component resides in the fact that these three reservoirs came into existence after the technological revolution of high-capacity groundwater pumps

Instream Flows

Western states have adopted various legal techniques – for example, prior appropriation permits, reserved waters, water market transactions – to develop instream flow water rights. Professor Janet Neuman is a prominent scholar on this topic and has celebrated the successes, albeit limited, of instream flow techniques.[161] Instream flows primarily have environmental and aesthetic value. Yet obviously if a stream has greater flows because of instream protections, a reservoir on that stream will likely capture greater amounts of water for storage within the reservoir. Thus, instream flow laws may have beneficial impact for Reclamation reservoirs.

In Oklahoma, the Oklahoma Comprehensive Water Plan made a priority recommendation as follows:

> Instream/Environmental Flows: In recognition of non-consumptive water needs and in support of recreational and local economic interests, the State should investigate establishment of an instream flow program for Oklahoma.[162]

As indicated by this recommendation, Oklahoma water law presently does not recognize instream flow as a water right. OWRB has worked with an Instream Flow Workgroup to

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and the availability of low-cost fuels to operate those pumps. In other words, farmers nearby these three reservoirs could irrigate their lands through groundwater wells and did not need a Reclamation irrigation project with canals. For a discussion of this technological revolution and its impact in water law, B. Griggs, *Interstate Water Litigation in the West: A Fifty-Year Retrospective*, 20 Denver Water L. Rev. 153 (2017).

[161] See e.g., J. Neuman, A. Squier & G. Achterman, *Sometimes a Great Notion: Oregon's Instream Flow Experiments*, 36 Environ. L. Rev. 1125 (2006); J. Neuman, *Protecting Instream Flows in Prior Appropriation States: Legal and Policy Issues* (2000), Water and Growth in the West (Summer Conference, June 7-9, University of Colorado). *See also*, J. Boyd (Student Article), *Hip Deep: A Survey of State Instream Flow Law from the Rocky Mountains to the Pacific Ocean*, 43 Nat. Res. J. 1151 (2003).

[162] OWRB, Oklahoma Comprehensive Water Plan: Executive Report (August 2011) at p. 4.

investigate ideas for a possible instream flow program for Oklahoma.[163] However, Oklahoma water law has two stream water approaches that indirectly allow for an instream flow protection.

OWRB defines beneficial use as including recreation and fish and wildlife (meaning fish and wildlife conservation).[164] In light of this definition, OWRB can accept and grant an applicant's petition to acquire a stream water permit for recreation, fish and wildlife. By recognizing a non-consumptive use for recreation and fish and wildlife, OWRB indirectly would be creating an instream flow right.

OWRB also has the obligation to protect riparian domestic uses of stream water. OWRB assumes a domestic riparian on every quarter section of land downstream from the applicant's point of diversion to the confluence with the next larger stream.[165] As the domestic riparian right is six acre-feet per year,[166] OWRB already recognizes a significant instream water flow on many streams.

Moreover, OWRB should be able to combine a stream water permit for recreation, fish and wildlife with the protection for domestic riparian use. By putting these two water rights together, the combination may well create a stream water flow with a large measure in cubic feet per second on some streams.

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[163] D. Couch & C. Klaver, *Beneficial Use in Oklahoma Water Law: Opportunity for Better Management or More Mischief?*, 64 Okla. L. Rev. 615, 647-652 (2012) (Instream Flow Workgroup discussion of various options for an instream flow program for Oklahoma.)

[164] Okla. Admin. Code § 785: 20-1-2 (2014) (Definitions of "Beneficial Use" and "Recreation, fish and wildlife use."

[165] D. Couch & C. Klaver, *Beneficial Use in Oklahoma Water Law: Opportunity for Better Management or More Mischief?*, 64 Okla. L. Rev. 615, 640 fn. 136 (2012).

[166] Okla. Admin. Cod § 785: 20-5-5(a)(2) (2014).

Artificial Aquifer Recharge

Aquifer Storage and Recovery in the western states is often one facet of a conjunctive management strategy. Idaho has particularly used aquifer recharge in its conjunctive management program.[167] In Idaho, the primary approach to aquifer storage and recovery is to use the extensive system of unlined canals from Reclamation irrigation projects to recharge groundwater aquifers with late fall, winter and early spring rains. The aquifer recharge is then recovered downstream on the hydrologically-connected river through increased stream-flow that seeps into the river from the connected aquifer by later summer months. The Idaho recharge effort has two main purposes: 1) to respond to late-summer "calls on the river" by senior stream water rights holders against groundwater pumpers; and 2) to reduce aquifer depletion for sustainable groundwater availability.[168] The Idaho Water Resources Board (IWRB) has the goal of recharging an average of 250,000 acre-feet a year to reach sustainable levels on groundwater pumping. Due to abundant rains in winter 2016 to winter 2018, IWRB was able to recharge 317,000 acre-feet in 2017 and 370,000 acre-feet in 2018.[169] Idaho appears to have the most active aquifer recharge program of any western state.

[167] E.g., K. Burchenal et al., *Augmenting Summer Streamflow: Innovative Approach in the Teton River, Idaho*, The Water Report pp. 10-17 (Issue # 173, July 15, 2018); D. Tuthill, P. Rassier & H. Anderson, *Conjunctive Management in Idaho*, The Water Report pp. 1-11 (Issue # 108, February 15, 2008).

[168] F. Ogden & M. Harm-Benson, *Integrated Management of Groundwater and Surface Water Resources: Investigation of Different Management Strategies and Testing in a Modeling Framework* pp. 11-19 (Idaho) (April 10, 2010) (copy in author's files).

[169] C. Dumas, *Idaho aquifer recharge headed for another big year*, Capital Press (February 22, 2018); F. Barnhill, *Idaho Aquifer Recharge More than Doubles Water Year Goal*, Boise State Public Radio (May 23, 2018).

In 2008, the Oklahoma Legislature required OWRB to develop criteria for an artificial aquifer recharge program.[170] In response, OWRB prepared an artificial aquifer recharge report that recommended three sites for an aquifer recharge pilot program.[171] Then in 2016, the Legislature enacted a statute directing the creation of an aquifer storage and recovery program.[172] OWRB responded by adopting regulations for aquifer storage and recovery.[173] The OWRB regulations define aquifer storage and recovery activities as follows:

> [A]ctivities that exclusively include activities for the storage of water in and recovery of water from an aquifer pursuant to a site-specific aquifer storage and recovery plan authorized by 82 O.S. § 1020.2A. ... ASR activities also shall not include groundwater recharge or augmentation through a natural connection with a farm pond or other impoundment otherwise authorized by law.[174]

From the author's reading of the new Oklahoma aquifer storage and recovery program, the program is not a conjunctive management program whereby groundwater would be managed to enhance stream flows. Lacking a conjunctive management approach, this author does not perceive that the Oklahoma aquifer storage and recovery program will have significant impact, favorably or unfavorably, upon the four Reclamation reservoirs that are the focus of this report. However, the author recognizes that aquifer storage and recovery may need to be addressed

[170] Oklahoma Senate Bill 1410 (2008).

[171] OWRB, Artificial Aquifer Recharge Issues & Recommendations (Comprehensive Water Plan Supplemental Report, June 2010).

[172] Okla. Stat. Tit. 82 § 1020.2A (2018).

[173] Okla. Admin. Code Tit. 785, Ch. 32 Aquifer Storage and Recovery (2018).

[174] Okla. Admin. Code 785:32-1-2. **Definitions** (2018).

anew in the chapters discussing the specific hydrological and legal situations of the four Reclamation reservoirs that are the ultimate focus of this legal review.

Public Interest

Western states generally have a public interest standard as an element of their prior appropriation stream water law. Oklahoma initially had a public interest standard as part of its prior appropriation stream water law that read as follows: "[The State Engineer [ultimately OWRB)] may also refuse to consider or approve an application or to order the publication of a notice thereof, if, in his opinion, the approval thereof would be contrary to the public interest."[175] However, when Oklahoma adopted its present stream water statutes in 1963, the Legislature specifically repealed the public interest standard for approval of a stream water permit.[176] There is no public interest standard in Oklahoma water law. The Legislature would have to pass explicit legislation to adopt anew a public interest standard for Oklahoma stream water law.

Dry-Year Option Lease

The definition of dry-year option lease is as follows: "A long-term lease agreement that maintains water in its original use in most years, but provides an intermittent water supply to other users under preset conditions."[177]

[175] Okla. Stat. Tit. 82 § 25 (1961).

[176] Laws 1963, c. 207 § 8 amended Okla. Stat. Tit. 82 § 25 and the Legislature deleted the sentence providing for a public interest standard.

[177] Environmental Defense Fund, Alternative Water Transfers in Colorado: A Review of Alternative Transfer Mechanisms for Front Range Municipalities (2016) at p. 13 Table 1.

In western states, water users seeking to protect their water supply have sought to use dry-year option leases as a technique by which to have access to a water supply from another water user. Under the dry-year option lease, the water user seeking a water supply gains the ability to access another user's water under specified, preset conditions – such as a drought or a demand for water of a certain intensity. The water user leasing away its water supply is willing to accept the lease payments (money), and to cease using its physical water, when the preset conditions occur. The dry-year option lease thus allows two water users to exchange physical water without directly purchasing or exchanging water rights.[178]

The four Reclamation reservoirs may well have the need (and assuredly the desire) to avoid a water shortage under almost all circumstances. Therefore, these reservoirs might consider using dry-year option leases so as to have access to other users' water when the reservoir falls below pre-determined storage levels. The author will explore this dry-year option lease in the specific context of each reservoir in the following chapters.

CONCLUSION

With this chapter on the background law from Federal, Oklahoma, and Wester water law, the report is now ready to turn to the application of this background law to the specific contexts – hydrological and legal – of the four Reclamation Reservoirs: Foss, Fort Cobb, Tom Steed, and W.C. Austin.

[178] *See also*, J. King & J. Ecklund, *Water Transfer Options: Alternative Transfer Mechanisms to Meet Changing Demands*, The Water Report pp. 1-7 (Issue # 172, June 15, 2018).

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CHAPTER THREE: MOUNTAIN PARK PROJECT -- TOM STEED RESERVOIR

I. MOUNTAIN PARK PROJECT – TOM STEED RESERVOIR – HISTORICAL BACKGROUND INFORMATION

In response to letters from the City of Altus, seeking a water supply for municipal and industrial purposes, the Bureau of Reclamation began developing the Mountain Park Project in early 1955. Reclamation wrote to the Division of Water Resources of the Oklahoma Planning and Resources Board (OPRB)[1] on May 4, 1955 requesting that all unappropriated waters of Otter Creek and Elk Creek be withdrawn from further appropriation.[2] On that same date (May 4, 1955), the OPRB acknowledged the Federal request and withheld the specified waters from further appropriation.[3]

The actions described in the preceding paragraph were in compliance with Okla. Statutes Title 82 § 91 that read in full in 1955 as follows:

> Whenever the proper officers of the United States, authorized by law to construct works for the utilization of waters within the State, shall notify the [Oklahoma Planning and Resources Board] that the United States intends to utilize certain specified waters, the waters so described, and unappropriated at the date of such notice, shall not be subject to further appropriation under the laws of this State, for a period of three years from the date of said notice, at which time the proper officers of the United States shall file plans for the proposed works in the office of the [Oklahoma Planning and Resources Board] for his information, and no adverse claim to the use of the water required in connection with such plans, initiated subsequent to the date of such notice, shall be recognized under the laws

[1] The Oklahoma Water Resources Board (OWRB) assumed all powers, duties, records, etc. of the Oklahoma Planning and Resources Board in 1957. Okla. Stat. Tit. 82 § 1073 (1959 Supp.)

[2] Letter from Fred G. Aandahl, Assistant Secretary of the Interior, to Ira C. Husky, Director, Division of Water Resources, Oklahoma Planning and Resources Board (May 4, 1955).

[3] Minutes of the Oklahoma Planning and Resources Board of May 4, 1955; Letter of Ira C. Husky, Director, Division of Water Resources, Oklahoma Planning and Resources Board to Fred G. Aandahl, Assistant Secretary of Interior (July 14, 1955).

> of the State, except as such amount of the water described in such notice as may be formally released in writing by an officer of the United States, thereunto duly authorized; Provided, that in case of failure to file plans for the proposed work within three years, as herein required, the waters specified in the notice given by the United States to the [Oklahoma Planning and Resources Board] shall become public water, subject to general appropriation.[4]

In October 1955, Reclamation filed a thirty-nine page report about the Mountain Park Project with ORPB in fulfillment of the statutory requirement to file plans about the use of the withdrawn waters within three years of the notice of withdrawal.[5] In the report, Reclamation presented three tentative plans for using the waters of the reservoir. Plan A discussed water supply for six municipalities plus an irrigation project for 2600 acres; Plan B devoted the entire water supply to eight municipalities; and Plan C devoted the entire water supply to an irrigation project.[6] With regard to Plans A, B, and C, Reclamation indicated that the "dependable yield ... would be about 13,700 acre-feet annually, over and above the required releases for water rights for lands located below the dam."[7] The report also described the use of water in the reservoir for recreation and fish/wildlife.[8]

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[4] Okla. Stat. Tit. 82 § 91 (1951)

[5] Bureau of Reclamation, Reconnaissance Report on Mountain Park Project Oklahoma (October 1955). [hereafter cited as ReconnReport MPP].

[6] ReconnReport MPP at pp. 24-27.

[7] ReconnReport MPP at p. 24.

[8] ReconnReport MPP at p. 17.

On July 3, 1962, the Oklahoma Water Resources Board [OWRB] wrote to Reclamation[9] setting forth three statements of particular relevance to the Mountain Park Project:

1) OWRB reaffirmed that the May 4, 1955 Reclamation withdrawal "is still in full force and effect by virtue of filing plans for the construction of works to utilize the water withdrawn ..."[10]

2) OWRB believes that the proposed project for "water conservation **storage** (emphasis added) is at or near the limits that the stream systems will provide."[11]

3) OWRB stated a "finding ... that: The future requirements for municipal and industrial water in the project area requires that the full yield of the Mountain Park reservoir be reserved for these purposes."[12]

OWRB attached to the July 3, 1962 letter an OWRB Resolution of 8 May 1962 supporting the construction of the Mountain Park Project and stating that the OWRB "will at the appropriate time make a Hydrographic Survey of Elk and Otter Creeks for the purpose of perfecting water rights in the basin which will include the withdrawal of waters by the United States dated May 4, 1955."[13]

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[9] Letter from Frank Rabb, Executive Director, Oklahoma Water Resources Board to M. G. Barclay, Area Planning Engineer, Bureau of Reclamation (July 3, 1962) in Bureau of Reclamation, Plan for Development for Mountain Park Project, Oklahoma (Revised June 1963). [hereinafter cited as Plan63 MPP].

[10] Plan63 MPP at p. 80.

[11] Plan63 MPP at p. 77.

[12] Plan63 MPP at p. 79.

[13] Plan63 MPP at p. 82.

In the Revised June 1963 Plan of Development, Reclamation carefully considered water rights for the Mountain Park project. Reclamation discussed stream water rights prior to May 4, 1955 both above and below the dam site for the reservoir. Reclamation determined that prior water right claims of individual applicants (19 above and 21 below) amounted to 7480 acre-feet annually but that the greatest amount actually used in any year totaled to 1040 acre-feet due to erratic flows and a lack of regulated storage. In light of this data, Reclamation concluded that "water right filings in Otter and Elk Creeks senior to the withdrawal for the Mountain Park Project will have no appreciable effect on the project water supply."[14] Reclamation also noted that several municipalities had stream water rights in the Mountain Park catchment basins but, for various practical reasons (assignment to the Project, abandonment, and alternative water supply sources), Reclamation did not consider these municipal water rights as impinging upon project water supply.[15]

In 1963 the Oklahoma Legislature adopted a new stream water code[16] and repealed the requirement that OWRB conduct hydrological stream surveys before OWRB could grant permitted water rights within Oklahoma's prior appropriation system.[17] Using the 1963 stream water code, OWRB determined vested stream water rights for the entire North Fork Red River Stream System (encompassing Otter Creek and Elk Creek).[18] Priorities # 1 through # 49 list

[14] Plan63 MPP at p. 46.

[15] Plan63 MPP at pp. 45-46.

[16] Laws 1963, c. 207, codified in Okla. Stat. Tit. 82, chap. 1 – Irrigation and Water Rights (1970 Supp.)

[17] Okla. Stat. Tit. 82 § 11 (1970 Supp.)

[18] OWRB Final Order No. 4 (14 July 1964).

NFRR application dates before the Reclamation withdrawal date of May 4, 1955 for the Mountain Park Project. Of these forty-nine pre-May 4, 1955 priorities, 14 individuals and 1 municipality take water from Otter Creek and its tributaries; 16 individuals and 1 municipality take water from Elk Creek and its tributaries. Priorities # 50 through # 79 list NFRR application dates after the Reclamation withdrawal date of May 4, 1955 until the adoption of the 1963 stream water code. Consequently, this OWRB determination of vested stream water rights in the North Fork Red River Stream System, as set forth in Final Order No. 4 (14 July 1964), is presumed to be a correct list of senior to junior prior appropriation water rights on Otter Creek and Elk Creek as of 14 July 1964.[19]

The author has several comments about the OWRB Final Order No. 4 (14 July 1964). First, OWRB lists priorities for thirty individuals on Otter Creek and Elk Creek before the Mountain Park withdrawal date of 4 May 1955 without distinguishing those above or below the Mountain Park Project. In its June 1963 Plan of Development, Reclamation identified nineteen individuals above the Mountain Park Project with water rights claims before 4 May 1955 and twenty-one individuals below the Mountain Park Project. Second, in July 1964 when OWRB issued Final Order No. 4, OWRB could not include the Mountain Park Project water rights on the Final Order No. 4 list of priorities because Congress had not yet authorized the Mountain

[19] Okla. Stat. Tit. 82 § 5, ¶ 3 (1970 Supp.) The senior to junior list of water-right holders on Otter Creek and Elk Creek, as set forth in the OWRB Final Order No. 4 of 14 July 1964, is a correct listing of water-right holders. However, the 1964 list differs from the current list of water-right holders on these two creeks that OWRB, MPMCD, and Reclamation used in modeling the water supply and the water demands for the Tom Steed Reservoir. While the differences between the list of 1964 water-right holders and the current list of water-right holders can be reconciled, the author does not think that the differences between the two lists (nor an explanation of how to reconcile the differences) changes the legal analysis and interpretation presented in this Chapter 3. Therefore, while the difference between the 1964 list and the current list is interesting, the author does not further pursue this difference to any substantial extent in the remainder of Chapter 3.

Park Project. In June 1964, Mountain Park Master Conservancy District did not yet exist to assert water rights. Third, the author tabulated the granted water rights for those before 4 May 1955 listed on Final Order No. 4. OWRB granted these thirty individuals a total of 4282 acre feet per year as their vested water rights.

In its June 1963 Plan of Development, Reclamation had calculated 7480 acre feet claimed and 1040 acre feet actually used. Thus, in July 1964, the OWRB grant of 4282 acre feet annually clearly falls within the range of water rights Reclamation had determined, in June 1963, to have seniority over the Mountain Park Project. This author concludes that Reclamation, looking at OWRB Final Order No. 4, would again conclude that senior water rights would have no appreciable effect on the Project water supply.[20]

On March 5, 1964, Governor Henry Bellmon provided Oklahoma's comments reviewing the June 1963 Plan of Development. In the letter, the OWRB commented that the proposed uses of Mountain Park water for municipal and industrial water supply, flood control, fish and wildlife, and recreation were in harmony with the policy of the State. OWRB also endorsed the size of Mountain Park reservoir as being in accord with Oklahoma policy to develop reservoir sites to maximum practical capacity so as to capture excess water that would be available for anticipated future needs. Governor Bellmon recommended that the Mountain Park Project be submitted to Congress for consideration at the earliest possible date.[21]

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[20] The author does not have access to information that would allow the author to harmonize the OWRB July 1964 list with the Reclamation June 1963 list. But as similarly stated in fn. 19 of this chapter, the author does not think that harmonization between the two lists (nor an explanation of how to harmonize) changes the legal analysis and interpretation presented in this Chapter 3. Therefore, while the difference between the OWRB July 1964 list and the Reclamation June 1963 list is interesting, the author does not pursue this difference further.

[21] Letter of Henry Bellmon, Governor to the Secretary of the Interior (March 5, 1964) at pp. 4-6.

The Secretary of Interior submitted a report on the Mountain Park Project to Congress on May 16, 1966.[22] The Secretary urged Congress to enact legislation to approved the Mountain Park Project.

On August 29, 1967, the Mountain Park Master Conservancy District (MPMCD) filed a stream water permit application with OWRB. OWRB granted MPMCD a permit in the amount of 45,000 acre-feet, an estimated average annual yield, for municipal, industrial and irrigation purposes. The permit contains the conditions that MPMCD not adversely affect prior water rights on Otter Creek and Elk Creek or domestic uses downstream of the reservoir. OWRB allowed diversion of excess water above 45,000 acre-feet into the reservoir to utilize the storage capacity of the reservoir and to avoid loss of beneficial use of water, through salt contamination, if the excess water were allowed to flow down the North Fork of the Red River.[23]

When issuing the 1967 permit, OWRB had before it for consideration Reclamation's yield study. OWRB understood, and thoroughly discussed, that the 45,000 acre-feet as average annual inflow was required to produce a dependable yield – or Reclamation's preferred term "firm yield" – of 16,100 acre-feet per year. In 1967, 16,100 acre-feet per year was the amount of water required to meet the identified needs of the beneficiaries of the Mountain Park Project – i.e. the beneficial uses for municipal, industrial, and irrigation purposes.[24]

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[22] Report of the Mountain Park Project, Oklahoma Pursuant to the Provisions of 53 Stat. 1187 (May 16, 1966).

[23] OWRB Permit 67-671 to Mountain Park Master Conservancy District (October 10, 1967). This October 10, 1967 permit is the original permit to MPMCD. This 1967 permit will be amended several times.

[24] The information in this paragraph comes from the verbatim transcript of the meeting of the Oklahoma Water Resources Board (the governing Board) of October 10, 1967 (Transcript prepared by Joan Wilkerson) as the Board discussed and approved MPMCD Permit 67-671 (October 10, 1967). Very interestingly, the Board actually adjourned its morning discussion of the MPMCD application so that the Board could speak with a Reclamation

Congress authorized the Mountain Park Project in 1968 for the principal purposes of storing, regulating, and furnishing water for municipal, domestic, and industrial uses, for conserving and developing fish and wildlife resources, for providing outdoor recreational opportunities, and controlling floods.[25] Although initially discussed as a purpose for the Mountain Park Project, Congress ultimately did not authorize irrigation as a project purpose for the Mountain Park Project and no irrigation infrastructure was ever constructed. In a report to Congress in 1974, Reclamation gave the following data for the Mountain Park Project: Storage Capacity of 113,800 acre feet divided into three pools -- 88,400 acre-feet conservation pool (the source of the water supply), 20,500 acre-feet flood control pool, and 4,900 acre-feet minimum or inactive/dead pool (for sediment accumulation); Firm Annual Yield of 16,100 acre-feet after 50 years of sediment accumulation.[26] Reclamation began construction in 1971 and completed construction in 1975 on the Reservoir. Reclamation finished other features of the Mountain Park Project (e.g. the water supply systems to the various participating municipalities) from 1975 through the early 1980s. In 1975, Congress named the completed reservoir after Oklahoma Congressman Tom Steed – the Tom Steed Reservoir.[27]

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official during an afternoon session about the quantity of water needed to provide a dependable "firm" yield of 16,100 acre-feet per year. From this discussion with the Reclamation official, the Board learned that the 45,000 acre-feet average annual yield was the amount Reclamation had determined was needed to produce an annual "firm yield" of 16,100 acre-feet to satisfy beneficial uses for the beneficiaries of the Mountain Park Project. *See also,* Letter to Randy Archer, Manager MPMCD, from James Allard, Deputy Area Manager Reclamation (January 25, 2008).

[25] Public Law 90-503, 82 Stat. 853 (Sept. 21, 1968).

[26] Statement of Acting Commission James J. O'Brien, Bureau of Reclamation before Subcommittee on Water and Power Resources, House Committee on Interior and Insular Affairs (April 22, 1974) at p. 3 (data on Project).

[27] Public Law 94-77, 89 Stat 410 (Aug. 9, 1975).

By 1982, OWRB became concerned with the water usage being reported by MPMCD. More specifically, OWRB was thinking about the prior appropriation doctrine that the holders of appropriation water-rights must actually use the water or lose the unused water back to the stream for appropriation by other beneficial users.[28] Oklahoma stream water law statutes adopt this "use it or lose it" doctrine. Okla. Stat. § 105.17 states:

> "... When the party entitled to the use of water commences using water but thereafter fails to beneficially use all or any part of the water claimed by him for which a right of use has been vested for the purpose for which it was appropriated for a period of seven (7) continuous years, such unused water shall revert to the public and shall be regarded as unappropriated public water."[29]

However, Oklahoma statutes also provide a mechanism by which water-rights holders can avoid loss of water as follows:

> "If, upon evidence presented to the Board, and considering the present and future needs of the stream system of origin, it appears that the proposed project, improvement or structure will promote the optimal beneficial use of water in the state, and it further appears that the total amount of water to be authorized by permit cannot be put to beneficial use within seven (7) years, then the Board shall provide in the permit the time within which the total amount to be authorized shall be put to beneficial use. This time shall be the useful life of the proposed project, improvement or structure as found by the Board. In order to insure orderly progress toward total beneficial utilization within the said time set by the Board, the Board shall provide in the permit a schedule of time within which certain percentages of the total amount to be authorized must be put to beneficial use."[30]

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[28] Memorandum to Reclamation Regional Director from Regional Supervisor of Water, Land and Power (March 24, 1982).

[29] Okla. Stat. Tit. 82 § 105.17 (1980 Supp.). Okla. Stat. Tit. 82 § 105.18 (1980 Supp.) sets forth the procedure through which OWRB enforces the forfeiture (loss of water) as described in § 105.17.

[30] Okla. Stat. Tit. 82 § 105.16 (1980 Supp.)

OWRB negotiated with MPMCD and Reclamation to reconfigure the 1967 water permit to conform to these "use it or lose it" statutes.[31] As a consequence, OWRB issued an amended water permit to MPMCD on February 8, 1983 to set forth a schedule of use for its water right. At the same time, OWRB reduced the amount of the water permit from 45,000 acre-feet to the firm yield amount of 16,100 acre-feet.[32] On May 6, 1991, OWRB and MPMCD again reached agreement to amend the 1967 permit by setting forth a new schedule of use as follows: 2000: 8950 a.f. (55%); 2010: 11,710 a.f. (73%); 2020: 14,190 a.f. (88%); 2030: 16,100 a.f. (100%). This 1991 amended permit is the current permit setting forth the water-right of MPMCD.[33]

In 1994, Congress amended the Mountain Park Project legislation to grant Reclamation and MPMCD explicit authority to engage in "environmental quality activities" – defined as "any activity that primarily benefits the quality of natural environmental resources."[34] The City of Frederick prompted the 1994 amendment for three reasons: 1) the City was looking for relief from its contractual repayment obligations for water, owed to MPMCD; 2) the City population had not grown; and 3) the City had never used any of its allocated share of the MPMCD water-right.[35] Of these three reasons, the most important from the perspective of the MPMCD water-

[31] Letter to Hoyt Shadid, District Manager MPMCD, from James Barnett, Exec. Dir. OWRB (June 4, 1982) and Letter to Hoyt Shadid, District Manager MPMCD from J.A. Wood, Chief Stream Water Division OWRB (February 8, 1983).

[32] Amended Permit 67-671 (February 8, 1983) attached to the Letter to Hoyt Shadid, District Manager MPMCD from J.A. Wood, Chief Stream Water Division OWRB (February 8, 1983).

[33] Amended Permit 67-671 (May 6, 1991).

[34] Public Law 103-434, 108 Stat. 4536 (Oct. 31, 1994) (amendment to § 402 of the Mountain Park Project Act of 1968).

[35] Letter to Randy Archer, District Manager MPMCD from Robert Johnston, City Manager City of Frederick (Nov. 23, 1994). Reading these three reasons, it is clear that the City of Frederick was paying reimbursement to MPMCD

right is the third reason because MPMCD has an obligation to put its water right to beneficial use, under its 1991 permit schedule of use, or face the possibility of losing water rights back to Oklahoma public waters.

As a consequence of the 1994 legislation, Reclamation, MPMCD, Oklahoma Department of Wildlife Conservation, and the city of Frederick developed an environmental quality plan to reallocate water from the City of Frederick to the restoration of Hackberry Flat as a wetland to be managed for migratory waterfowl.[36] In the Reclamation Environmental Quality Plan (EQP), the City of Frederick agreed to relinquish 2,353 acre-feet of its MPMCD allocated water to the Oklahoma Department of Wildlife Conservation, the state agency that owns and manages Hackberry Flat.[37] The City of Frederick retained 1,568 acre-feet, from its original allocation of 3,921 acre-feet, as a back-up water supply. In recognition of the EQP, MPMCD and the City of Frederick renegotiated their water supply contract to reflect the City's reduced allocated water right and reduced payment obligations for water, owed to MPMCD.[38] In turn, MPMCD and the Oklahoma Department of Wildlife Conservation entered into a water supply contract for Hackberry Flat.[39]

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for an allocation of water that, in fact, the City of Frederick had not used and for which the City had no immediate future need.

[36] Environmental Quality (EQ) Plan signed on April 26, 1995 by the Mayor of the City of Frederick, the District Manager of MPMCD, Area Manager of Oklahoma-Texas Bureau of Reclamation, and Director of the Oklahoma Department of Wildlife Conservation. (hereafter cited as EQP 1995).

[37] EQP 1995 at p. 3.

[38] First Revised and Restated Contract by and Among the MPMCD and the City of Frederick and the Frederick Public Works Authority (May 31, 2005). The contract lasts until June 1, 2030.

[39] Contract between MPMCD and State of Oklahoma (Oklahoma Department of Wildlife Conservation) for an Environmental Quality Water Supply (20 October 2016).

II. DEFINING THE STREAM WATER RIGHTS OF MOUNTAIN PARK MASTER CONSERVANCY DISTRICT

As the author of this Chapter has thought about the water rights of MPMCD, the author came to envision three distinct scenarios for MPMCD water rights that deserve discussion. The first scenario attempts to understand and to clarify the OWRB permit issued to MPMCD on August 29, 1967 and as amended in 1983 and 1991. The second scenario makes a maximalist water-rights claim in which MPMCD asserts a water-right to a full reservoir – i.e., to the top of the conservation pool of Tom Steed Reservoir. The third scenario discusses the possibility of MPMCD seeking new, additional water rights from OWRB so as to better protect its already granted water rights and to better protect its water supply looking toward to future of water demands in the Otter Creek and Elk Creek basins.

a. MPMCD Permit 67-671 – Understanding and Clarifying

As of October 10, 1967, MPMCD had a permit for stream water that reads: "... permit is issued for 45,000 acre-feet of water" for municipal, industrial, and irrigation purposes.[40] In 1983, Permit 67-671 was amended as follows: "... permit is issued for ~~45,000~~ 16,100 acre-feet of water, an estimated average annual yield ..." OWRB also specified a schedule of use of the 16,100 acre-feet until the expiration of the life of the project (the year 2030) with which MPMCD would have to comply in order to maintain its permitted water-right.[41]

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[40] OWRB Permit No. P67-471 (Aug. 29, 1967).

[41] OWRB Permit No. P67-671 (amended on Feb. 8, 1983). Permit P67-671 was again amended with a new schedule of use in 1991. OWRB Permit No. P67-671 (amended on May 6, 1991). The author's discussion in the text is applicable to both the 1983 and the 1991 amendments of the original 1967 permit.

What is clear from the documents about MPMCD Permit 67-671 is that OWRB and Reclamation/MPMCD were not in agreement about the 1983 amendment. Oklahoma was concerned about the "use it or lose" doctrine of Oklahoma's prior appropriation system; Reclamation and MPMCD were concerned about protecting the 45,000 acre-feet average annual yield so as to protect the firm yield of 16,100 acre-feet for municipal and industrial beneficiaries of the Tom Steed Reservoir.[42]

As indicated in the quotation in the immediately preceding footnote (fn. 42), OWRB and Reclamation/MPMCD were in disagreement on a number of points about the Oklahoma prior appropriation stream water law. However, for the purpose of understanding and clarifying MPMCD Permit 67-671, the author considers the key disagreement to be found in the quoted sentence: "Other points of disagreement included OWRB's methods of determining 'unused water' and the lack of agreement on M&I carryover storage requirements."

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[42] The disagreement between OWRB and Reclamation/MPMCD can best be understood by quoting from the contemporary document as follows:

> "Oklahoma ... wants to identify appropriate water right amounts for each Bureau reservoir then [OWRB's] staff will run computer analysis on the stream system to determine if other waters are available for appropriation. If waters are available, rights will be granted to other users up to the limit of the stream. (p. 1)
>
> "...
>
> "[The OWRB Executive Director] states that either the water rights are limited to the amount of water used or a schedule of use must be included with the water-right permit. What is not acceptable to the Bureau is the current date requirement (1982) on a proposed supplement thereby adding a use schedule to an existing water right when the original water right application did not include a schedule of use because the State of Oklahoma did not require or request one at the time of initial filing. Other points of disagreement included OWRB's methods of determining "unused water" and the lack of agreement on M&I carryover storage requirements. ..." (p. 2).
>
> Memorandum to Reclamation Regional Director from Reclamation Regional Supervisor of Water, Land and Power (March 24, 1982).

See also, Memorandum from Roy J. Buettner, Acting Regional Hydrologist, Bureau of Reclamation to Oklahoma City Regional Planning Officer, Bureau of Reclamation (Aug. 28, 1985) at p. 1 where Buettner wrote: "Originally, the water right for the project was 45,000 acre-feet per year. This was modified to 16,100 acre-feet per year which was the estimated firm yield of the project by the Bureau."

In 1982-1983, OWRB apparently considered the amount of water between the firm yield of 16,100 acre-feet and the 45,000 acre-feet average annual yield to be "unused water" and therefore subject to appropriation by other beneficial users. By contrast, Reclamation and MPMCD apparently considered the 45,000 acre-feet average annual yield as the granted (perfected) water right needed to protect the firm yield of 16,100 acre-feet per year. Reclamation/MPMCD held this legal position seemingly for two reasons: 1) as presented to the OWRB governing Board in 1967, 45,000 acre-feet average annual yield was the amount of water right Reclamation required to justify the economic viability of the MPP and to provide the economic basis upon which to proceed with construction; 2) 45,000 acre-feet average annual yield is a reasonable diversion at the point of diversion (the Tom Steed Reservoir) so as to protect the underlying firm yield of 16,100 acre-feet of identified beneficial uses for municipal and industrial uses while taking into account yearly fluctuations in rainfall and yearly fluctuations in evaporation and seepage from the reservoir.[43] Under prior appropriation law, appropriators have appropriative rights for the amount of water needed for reasonable carriage to the point of beneficial use where the water is physically put to use. In other words, appropriators have a water right for the amount of reasonable carriage plus the amount actually used for the beneficial purpose.

OWRB and Reclamation/MCMPD should consider reaching an agreement as to whether the 45,000 average annual yield, as stated in the original 1967 permit, is a reasonable diversion.

[43] For a general discussion of the concept of reasonable diversion, read D. Getches, WATER LAW IN A NUTSHELL (4th ed. 2009) at Chapter 3, VII Extent of the Appropriative Right, B Beneficial Use as a Limit, 2. "Reasonably Efficient Means of Diversion" pp. 133-137. To the author's knowledge, neither Oklahoma prior appropriation statutes, OWRB regulations, nor Oklahoma case law has addressed the concept of reasonable diversion.

If so, then the permitted (perfected) water right for MPMCD could be reinstated to the 45,000 acre feet average annual yield. OWRB can then still properly impose a schedule of use for the firm yield of 16,100 acre-feet as the identified beneficial uses for beneficiaries of the MPMCD water right.

The author posits another explanation for the reduction from the 1967 permit of 45,000 acre-feet per year to the 1983 permit of 16,100 acre-feet per year. In 1967, OWRB allowed evaporation to be part of the actual use of water and, thus, to be part of the amount permitted to the District by OWRB.[44] By the early 1980s, OWRB had changed its position on evaporation and did not consider evaporation to be an actual use of water and, thus, did not consider that evaporation could be included within the amount OWRB permitted to the District.[45]

Although in the documents related to MPMCD the author has not read any discussion of evaporation, the author believes that the 45,000 acre-feet the District claimed in 1967 assuredly included an amount of average annual evaporation as a component of the 1967 permit. When OWRB reduced the District's permit in 1983 to 16,100 acre-feet per year, the author believes that OWRB assuredly was excluding the average annual evaporation from the amount permitted to the District.

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[44] Memorandum from Area Engineer (Flagg) to Reclamation Office Files (Jan. 22, 1969). In the memorandum, specifically referring to Fort Cobb Reservoir, Flagg wrote, "The State has modified its position on evaporation and is now allowing it to be included with actual use."

[45] *See e.g.*, Draft Letter from James Barnett, Exec. Dir. OWRB to Harold Broadbent, Commissioner of Reclamation (n.d. but context seems to be 1982). In this Draft Letter, specifically referring to Fort Cobb Reservoir, Barnett wrote: "The larger figure (29,000 a.f.) erroneously includes an average of 19,046 a.f. lost annually to evaporation, and inclusion and tolerance of such error would seem to legitimize evaporation as a beneficial use of water." *Id.* at p. 2.

The fact that OWRB adopted the policy that evaporation should not be included within the permitted amount to the District does not mean that OWRB and the District can ignore evaporation in the issuance and enforcement of stream water rights.[46] To this author's mind, there are two ways to approach evaporation loss. OWRB and the District could revert to the OWRB policy of the late 1960s to include evaporation in the amount permitted to the District. If OWRB and the District reverted to allowing evaporation as a component of the permit, OWRB and the District would possibly restore the District's water right as 45,000 acre-feet per year. Alternatively, OWRB could account for evaporation as it determines whether unappropriated water exist for future applicants for water rights and as it acts to protect water rights from interference by junior water-rights holders. The author will more fully discuss this "interference" approach to accounting for evaporation in Part III(a) of this chapter.

To the author's mind, OWRB and Reclamation/MPMCD need to reach an understanding and clarification of the permit on another point. Were there any additional beneficial purposes for the water in the Tom Steed Reservoir that MPMCD could have claimed as a water right in 1967?

As indicated in the historical background information presented in Part I of this Chapter, Reclamation had consistently discussed recreation, fish, and wildlife purposes as additional uses for the water in the Mountain Park Project. Moreover, OWRB had acknowledged these additional purposes as being in harmony with the policy of the State of Oklahoma for water

[46] Letter of James Barnett, Exec. Dir. OWRB to Robert Weimer, Regional Director Reclamation (July 16, 1981). In the letter about Fort Cobb Reservoir, Barnett agreed with Weimer that evaporation must be duly accounted for but that OWRB and the District disagreed about how to acknowledge administratively the evaporation loss from the reservoir.

developments. Furthermore, although after MPMCD had received its permit for stream water in August 1967, Congress explicitly legislated fish and wildlife development and recreation enhancement as an authorized purpose for the Mountain Park Project in 1968.[47] Did MPMCD have a claim in 1967 for a water right for fish, wildlife, and recreational purposes, based on the 1955 Reclamation withdrawal notice and subsequent MPP plans, that MPMCD failed to assert?

The Oklahoma Legislature has never defined "beneficial use." However, the Legislature has enacted two statutes that make reference to beneficial use by providing a non-exclusive list of identified purposes that qualify as beneficial use. In the 1972 Oklahoma Ground Water Code, the Legislature identified agriculture, domestic, municipal, and industrial and other (unspecified) beneficial uses for groundwater resources.[48] In 1993, the Legislature stated a policy to "protect, maintain and improve the quality thereof for public water supplies, for the propagation of wildlife, fish and aquatic life and for domestic, agricultural, industrial, recreational and other legitimate beneficial uses; ..."[49]

OWRB has defined the term "beneficial use" in its regulations. In 1964, OWRB stated "'Beneficial use' means the use of such quantity of stream or groundwater when reasonable intelligence and reasonable diligence are exercised in its application for a lawful purpose and as

[47] Public Law 90-503, 82 Stat. 853 § 5 (Sept. 21, 1968).

[48] Okla. Stat. Tit. 82 § 1020.2(A) (2011) (eff. July 1, 1973).

[49] Okla. Stat. Tit. 82 § 1084.1 (2011) (eff. July 1, 1993).

Relating to the discussion in the text, D. Couch & L. Klaver, *Beneficial Use in Oklahoma Water Law: Opportunity for Better Management or More Mischief?*, 64 OKLA. L. REV. 615 (2012), especially pp. 628-634 (Beneficial Use Defined by Rule) and pp. 644-652 (Beneficial Use, Nonconsumptive Use and Instream Flow Use).

is economically necessary for that purpose."[50] In 1973, OWRB added a second sentence to the definition that reads: "Beneficial uses include but are not limited to municipal, industrial, agricultural, irrigation, recreation, fish and wildlife, etc."[51] OWRB defines "beneficial use" with these two sentences – the narrative sentence and the non-exclusive list sentence – as the regulatory definition today in 2021.

While the law of prior appropriation has long recognized that the term "beneficial use" is a term that changes with societal conceptions of "beneficial uses," in Oklahoma in 1967 when MPMCD applied for a water permit, the term "beneficial use" had not clearly been expanded, either legislatively or administratively, to include recreation, fish, or wildlife. Hence, cautious applicants and administrators in Oklahoma in 1967 might well have been reluctant to seek or to grant a water right in 1967 specifically for recreation, fish, and wildlife. By contrast, today those three uses are clearly beneficial uses of stream water in Oklahoma.

Concurrently with cautiousness about the definition of "beneficial use," MPMCD also may have worried about another difficulty with asserting a water right for recreation, fish, and wildlife in 1967. Western prior appropriation law, including Oklahoma,[52] conceptually had considered a physical diversion of the water as an element of a prior appropriation water right.

Does a claim to a water right in a reservoir satisfy the "physical diversion" for a prior appropriation stream water right? The answer must be "yes" or otherwise Reclamation

[50] OWRB Rule 115.1 (1964).

[51] OWRB Rule 300.1(o), 600.1(g) (1973).

[52] Gates v. Settlers Milling Canal & Reservoir Co., 91 P. 856 (Okla. 1907); Okla. Stat. Tit. 82 § 105.11(A) (2011) (applicant must give public notice in a newspaper in a county of the point of diversion.)

reservoirs would not have gained state-granted water permits since the passage of the Reclamation Act in 1902. A reservoir itself is a visible physical diversion of the water of a stream from its normal flow downstream in the stream channel. More specifically with respect to the Mountain Park Project, MPMCD physically diverts water from Elk Creek into the Bretch diversion to the Tom Steed Reservoir located on Otter Creek. Finally, OWRB Permit 67-671 itself twice uses the word "diversion" to describe the water flowing into the Tom Steed Reservoir. Hence, the Mountain Park Project assuredly satisfies any diversion requirement in Oklahoma stream water law.

Without doubt, MPMCD could today assert a water right for beneficial purposes for recreation, fish and wildlife. More importantly, MPMCD could have asserted an existing water right for these three non-consumptive purposes without raising any legal objections as early as 1973 when OWRB explicitly included these three non-consumptive purposes within the regulatory definition of beneficial use.

IF MPMCD sought a clarified water right in its permit for recreation, fish and wildlife, MPMCD might urge OWRB to consider the following:

1. OWRB might quantify the stream water rights of MPMCD to include the beneficial uses of water as set forth in the filed plans for the Mountain Park Project.

2. The Reclamation plans from 1955 and all additional plans of August 1962, June 1963, and May 1966 for the Mountain Park Project expressly identified recreation, fish, and wildlife purposes for the waters of the Mountain Park Project.

3. By being identified in the Reclamation plans, these beneficial uses for recreation, fish, and wildlife have the seniority date of the Reclamation withdrawal – May 4, 1955.[53]

4. While the quantified amount of the water right for MPMCD that includes recreation, fish and wildlife is subject to further discussion, it may well be that the most legally defensible quantified amount is the 28,900 acre-feet of water above the firm yield amount of 16,100 acre-feet per year (i.e. the 45,000 acre-feet) that is set forth in the August 29, 1967 application and that OWRB actually granted as the permitted (perfected) water right in the original OWRB Permit 67-671 of August 29, 1967.

Forty-five thousand acre-feet would clearly not be an arbitrary quantity but, rather, would reflect the amount that a cautious, uncertain applicant and regulator hesitated to seek or to grant in 1967. MPMCD now would only be clarifying the quantity and the purposes that MPMCD originally had asserted in its 1967 application. MPMCD and OWRB would finally be in agreement that the accurate perfected stream water right for the Tom Steed Reservoir is 45,000 acre-feet per year with a seniority of May 4, 1955.

Quantifying the water rights of MPMCD has several advantages. First, if MPMCD gained water rights for the additional beneficial purposes of recreation, fish and wildlife, MPMCD obviously would have a larger amount in acre-feet of permitted (perfected) water rights. Second, by having a larger amount of water rights, MPMCD would be able to seek

[53] *See*, *Oklahoma Water Resources Board v. Foss Reservoir Master Conservancy District*, 1974 OK 113, 527 P.2d 162. In this case, the Supreme Court of Oklahoma ruled that the Foss Reservoir Master Conservancy District had a seniority date for its water rights as of the date of the Reclamation notice withdrawing the specified waters from further appropriation under the Oklahoma federal withdrawal statute. That statute today is Okla. Stat. Tit. 82 § 105.29 (2011).

protection for that larger amount at an earlier point in time during a drought or other shortage situations. MPMCD would be able to assert interference[54] with its water rights sooner when its water rights are quantified above the 16,100 acre-feet per year that is reflected in the language of the current permit. Third, if MPMCD were able to obtain protection for this larger amount of water rights – all of which are non-consumptive uses –, MPMCD effectively would have the ability to better protect its core water rights for municipal, industrial, and other beneficial uses for which MPMCD is contractually obligated to protect. Fourth, if MPMCD has a quantified right to store up to 45,000 acre-feet, arguably there is no need for a "Schedule of Use" in the permit because MPMCD has a right to store 45,000 acre-feet regardless of the amount of water actually conveyed to contractual water users.

In other words, quantifying MPMCD's water rights at 45,000 acre-feet or above, as being discussed here in the text, means that MPMCD is at less risk of failing to deliver water under its water supply contracts and, therefore, less risk of failing to meet its existing financial obligations (e.g. O&M, etc.) and debt service. Those who have contracts for consumptive use for municipal, industrial, or other beneficial uses have contractual obligations to reimburse MPMCD for their proportionate share of capital and O&M costs to store and convey water for those ultimate beneficial users. Moreover, quantifying MPMCD's water rights also may mean that MPMCD is at less risk of a reduction in water rights under a "loss it or use it" approach implied by having a Schedule of Use in its water permit.

[54] Part III of this Chapter discusses the concept of interference under Oklahoma stream water law as applied to the Tom Steed Reservoir.

If OWRB were open to quantify MPMCD's water rights and as MPMCD has an interest in gaining such clarified quantification, the remaining issue that needs brief discussion is the procedure by which to pursue quantification.

As shown on the face of MPMCD's current water permit, P67-671 (May 6, 1991), OWRB has twice amended MPMCD's permit so as to reduce MPMCD's permitted amount and so as to create a schedule of use of the permitted water– on February 8, 1983 and May 6, 1991. OWRB and MPMCD may be able to use the same procedure to seek an amendment for clarification of P67-671 in order to quantify MPMCD's water right for recreation, fish, and wildlife purposes. OWRB provides a procedure for the amendment of stream water rights in its regulations.[55]

As an alternative to the amendment procedure, OWRB and MPMCD might turn to the procedures in Okla. Stat. Tit. 82 §§ 105.6, 105.7 and 105.8 (2011).[56] These three statutory provisions allow for a general stream adjudication of a stream, which is usually a complex and daunting task. But maybe a general adjudication of Otter Creek and Elk Creek would not be excessively complex and daunting because OWRB has already determined the vested water rights for Otter and Elk Creeks in OWRB Final Order No. 4 (14 July 1964).[57] Building upon

[55] Okla. Admin. Code § 785: 20-9-4 (2014). If OWRB and MPMCD used the amendment procedure, MPMCD would have to petition for the amendment and give notice in county newspapers, as designated by OWRB. Those who oppose the amendment could file protests and trigger hearings. Id. at § 785: 20-9-4(d).

[56] The Oklahoma legislature adopted the procedures of Okla. Stat. Tit. 82 §§ 105.6 to 105.8 in 1972. Laws 1972, c. 256 §§ 6-8. These sections replaced the procedure for determining persons possessing vested rights to water set forth in Okla. Stat. Tit. 82 § 6 (1971).

[57] OWRB Final Order No. 4 (14 July 1964) created a senior to junior list of vested water rights for the North Fork Red River System (encompassing Otter and Elk Creeks) up to the effective date of the adoption of the 1963 stream water code. This list is conclusive of the vested water rights and their priority dates. Okla. Stat. Tit. 82 § 6 last ¶ (1971).

Final Order No. 4, OWRB may have a procedure to adjudicate MPMCD's water rights for recreation, fish, and wildlife. In effect, OWRB may be able to use this adjudication process to determine MPMCD's vested water rights and to insert MPMCD's priority date into Final Order No. 4 (14 July 1964). In 1964, OWRB was not able to insert MPMCD's water rights into the Final Order because the MPMCD did not yet exist in 1964.

To be clear, quantifying MPMCD's water rights for recreation, fish, and wildlife is not an application for a new water right. With regard to water rights for recreation, fish, and wildlife, as discussed in Reclamation plans from 1955 forward, MPMCD would be seeking to establish the purposes and the quantity of its water rights that MPMCD has had ever since Reclamation gave notice on May 4, 1955 to the State of Oklahoma requesting the withdrawal of specified waters from Otter and Elk Creeks for the proposed Mountain Park Project.

To the author's mind, OWRB, MPMCD and Reclamation need to reach an understanding and clarification of the permit on yet another point. When OWRB amended the MPMCD Permit 67-671 in 1983, OWRB did so as follows: "… permit is issued for ~~45,000~~ 16,100 acre-feet of water, an estimated average annual yield" But as the historical background to the Mountain Park Project shows,[58] the 16,100 acre-feet is not an "estimated annual yield" but rather the "firm yield"[59] that MPMCD must have to fulfill its contractual obligations to its municipal, industrial,

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[58] Read footnote 24 and accompanying text in this Chapter.

[59] "Firm yield" carries the following definition: "Firm yield is the amount of water that can be withdrawn from the reservoir each year including the yeas of most critical drought of record under the conditions of flow and reservoir sedimentation assumed for the study [of the Reservoir's water supply.]" See e.g., Letter from Robert Weimer, Reg. Dir. Reclamation to James Barnett, Exec. Dir. OWRB (Dec. 5, 1980) at pp. 1-2. Both Reclamation and OWRB have used this definition of firm yield in many documents.

and recreational water customers. The author speculates that when OWRB struck through the 45,000 acre-feet amount, OWRB should also have struck through the words "an estimated average annual yield" and substituted the words "the annual firm yield of the Reservoir." In other words, the author thinks the Permit 67-671 contains a scrivener's error that has an important implication.

The important implication is the following. With MPMCD secure in its firm yield (16,100 acre-feet per year) (and taking into account, somehow, the unavoidable annual evaporation from the Tom Steed Reservoir), the author believes that the water in storage above the firm yield amount is the "storage right" of the Reservoir. MPMCD stores this water for the maximum beneficial use of water from Elk Creek and Otter Creek. MPMCD stores this water as a trustee for other prior appropriators who apply to use the surplus water for beneficial purposes within Oklahoma's prior-appropriation stream water law.

OWRB can grant a permit to applicants for an amount within the quantity of water stored in the reservoir.[60] For these permits, OWRB is required to put a condition on the permit that the applicant enter into a repayment contract with the District within two years of the issuance of the permit.[61] In the author's opinion, OWRB also may consider putting a condition into a surplus water permit that clearly specifies how and when the surplus water permit ends so as to protect the MPMCD's firm yield senior water right of 16,100 acre-feet per year. Even if OWRB does

[60] *See*, Okla. Admin. Code § 785-20-5-5(b)(1) (2014).

[61] Okla. Admin. Code § 785-20-7-5 (2014). *See also*, Okla. Stat. Tit. 82 § 105.21 **Surplus water** (2011) that states, "… shall be required to deliver such surplus, at reasonable rates for storage or carriage, or both, as the case may be, to the parties entitled to the use of the water for beneficial purposes. …"

not add the author's suggested condition, MPMCD assuredly will add a clause to the mandatory contract between it and the surplus water user indicating when MPMCD is entitled to end surplus water delivery – in order to protect its firm yield water right and to protect its contractual users of MPMCD's firm yield water.

As OWRB and MPMCD work together to understand and to clarify MPMCD's Permit 67-671, these two entities also should consider updating the permit to reflect the current water usage of MPMCD's water right. In the permit, as it presently reads, MPMCD has applied for a permit for irrigation for 3,000 acres and municipal water for Altus and Snyder. When Congress authorized the Mountain Park Project, Congress did not authorize any irrigation component for the MPP.[62] Hence, the permit needs to remove the reference to irrigation as a purpose of the project. Moreover, in 1974 Congress also authorized the City of Frederick to receive municipal water from the Tom Steed Reservoir.[63] Hence, the permit may need to reflect this municipal water for the City of Frederick. And last, as more fully explained in the historical background to the MPP, the City of Frederick relinquished 60% of its allocated Tom Steed water to be used for environmental quality (EQ) activities. MPMCD has contracted with the Oklahoma Department of Wildlife Conservation for use of this EQ water at the Hackberry Flat Management Area.[64] The permit needs to be updated to reflect this change in water allocation and in beneficiaries of the MPMCD water right.

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[62] Public Law 90-502, 82 Stat. 853 (Sept. 21, 1968).

[63] Public Law 93-493, 88 Stat. 1486 (Oct. 27, 1974).

[64] EQP 1995 at p. 3.

b. Top of the Conservation Pool

Tom Steed Reservoir has a conservation pool capacity of 88,400 acre-feet per year as estimated in 1974. If the MPMCD water right were defined as 88,400 acre-feet, any level of storage below the full conservation pool would allow MPMCD to assert seniority rights to water at that point in time. What are the legal issues involved if MPMCD were to assert a water right of 88,400 acre-feet?

OWRB could point immediately to Permit No. P67-671 (Aug. 29, 1967) granting MPMCD a water right in the amount of 45,000 acre-feet per year on average (to produce a firm yield of 16,100 acre-feet per year) for municipal, industrial, and irrigation purposes. OWRB could also highlight that the permit explicitly authorized MPMCD to store additional waters above 45,000 acre-feet so as to prevent waste and to anticipate future water needs for beneficial users (appropriators) in the Otter Creek and Elk Creek basins. Emphasizing the distinction between a water right and a storage right, OWRB could assert that the amount of water above 45,000 acre-feet, granted to assure the firm yield of 16,100 acre-feet for identified beneficial uses, constitutes the storage right held by MPMCD as a fiduciary for others' future beneficial-use water needs. In other words, OWRB could say that the difference between 88,400 acre-feet (the top of the conservation pool) and the permitted 45,000 acre-feet is the MPMCD storage right of 43,500 acre-feet in the Tom Steed Reservoir.

OWRB could also point to the documentation, as described in the historical background information in Part I, to show that OWRB consistently and repeatedly handled the Mountain Park Project in accordance with Oklahoma statutes. More specifically, OWRB interpreted 82

Okla. Stat. § 91 on the notice of federal withdrawal as creating the date on which water rights for MPMCD arose but not as creating specific water rights based on the withdrawal notice itself. As resolved on 8 May 1962, OWRB said it "will at the appropriate time make [a determination] for the purpose of perfecting water rights."[65] In accord with Oklahoma statutes, OWRB considered the MPMCD application of August 28, 1967 as the "appropriate time," resulting in Permit P67-671 setting forth the perfected water rights of 45,000 acre-feet on average so as to produce a firm yield of 16,100 acre-feet per year Moreover, the historical documentation shows that OWRB consistently distinguished between a water right and a storage right for MPMCD.

Aside from the permit and the documentation, OWRB could also argue that Reclamation and MPMCD acknowledged and accepted Permit 67-671 (Aug. 29, 1967), setting the perfected water right as 45,000 acre feet as the average annual basin yield.[66]

By contrast, MPMCD could emphasize that the Reclamation withdrawal notice of May 4, 1955 specified all unappropriated waters of Otter and Elk creeks and that " , , , no adverse claim to the use of water required in connection with such [Mountain Park Project] plans, initiated subsequent to the date of such notice, shall be recognized under the laws of the State ..."[67] MPMCD could argue that 88,400 acre-feet in the conservation pool and 45,000 acre-feet per year average inflow is required to produce a dependable "firm" yield of 16,1000 acre-feet per year as

[65] Plans63 MPP at p. 82.

[66] Verbatim transcript of the meeting of the Oklahoma Water Resources Board (the governing Board) of October 10, 1967 (Transcript prepared by Joan Wilkerson). Read particularly the afternoon discussion between the members of the governing Board of OWRB and the Reclamation official who came to the Board meeting (at the express request of the OWRB governing Board).

[67] Okla. Stat. Tit. 82 § 91 (1951).

demonstrated in the Reclamation plans for the Mountain Park Project. More specifically, MPMCD could argue that without this protection to the top of the conservation pool, MPMCD would not be able to fulfill, in times of drought, its water supply contracts with the municipal, industrial, and, since 1994, environmental quality users of Reservoir water. MPMCD could argue further that if MPMCD cannot deliver water per its contracts, MPMCD is in jeopardy of being unable to fulfill its repayment obligations.

Several counter arguments exist to this potential contrasting MPMCD interpretation of Okla. Stat. Tit. 82 § 91 governing Reclamation withdrawal of waters from Oklahoma streams.

First, OWRB could point to the Reclamation plans relating to the Mountain Park Project. In these documents, Reclamation repeatedly focused on firm annual yield (ultimately 16,100 acre-feet) as the water required in connection with such plans. However, while Reclamation documents do not explicitly refer at any point to protection of that firm annual yield by claiming the water to the top of the conservation pool, the reservoir yield analysis included in those planning documents demonstrated that an average annual inflow of 45,000 acre-feet per year was required to provide the 16,100 acre-feet firm yield, and that conservation capacity and associated depletion of sediment accumulation are tied to the firm annual yield calculation.[68] Based on the verbatim transcript from the October 10, 1967 OWRB governing Board meeting, approving the 45,000 acre-feet water right, Board members understood that an average annual inflow of 45,000 acre-feet was required to produce a dependable "firm" yield of 16,100 acre-feet. If the Board

[68] Statement of Acting Commission James J. O'Brien, Bureau of Reclamation before Subcommittee on Water and Power Resources, House Committee on Interior and Insular Affairs (April 22, 1974) at p. 3 (data on Project).

had offered a permit for less than 45,000 acre-feet, Reclamation likely would not have had a sufficient water right to support the economic viability of the MPP, thereby jeopardizing its construction. By 1967 and earlier, the State of Oklahoma and OWRB had repeatedly endorsed and requested construction of the Mountain Park Project.

Second, OWRB could argue that the proper Okla. Stat.§ 91 interpretation requires also taking into account the 1959 amendment to Reclamation withdrawal statute that states:

> Any water heretofore ... withdrawn by the United States ... in the stream systems of the State shall be only those waters necessary for the plans filed for the projects [sic] economic justification and water supply. Any remaining portion of the waters of such stream system ... shall be subject to general appropriation by State law; ...[69]

OWRB could assert that Reclamation's plans for the project indicated that the waters necessary for economic justification and water supply was 45,000 acre-feet average annual yield required to produce the firm annual yield (16,100 acre-feet). Reclamation did not discuss water rights to the top of the conservation pool as the water supply needed for the economic justification of the MPP. Hence, in October 1967 the Board focused on the 45,000 acre-feet average annual yield as the quantity of water needed to satisfy the economic justification set forth in the 1959 statute.[70]

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[69] Okla. Stat. Tit. 82 § 97 (1959 Supp.)

[70] Citation to the 1959 amendment to the Oklahoma Statute (§ 91) on Reclamation withdrawal raises the important and difficult issue as to whether a court would allow the 1959 statute (and later amendments), despite its language "heretofore," to apply retroactively to a 1955 Reclamation withdrawal notice. As this report is articulating the legal issues about MPMCD asserting a water right to the top of the conservation pool, the author only points out this issue of prospective or retroactive application of the 1959 amendment without providing a discussion of the nuances of Oklahoma case law relating to prospective or retroactive application of a statutory amendment.

More importantly, the governing Board of OWRB discussed the "economic justification" of the MPP throughout its October 10, 1967 meeting at which the Board granted Permit 67-671 with its water-right of 45,000 acre-feet per year. Hence, the Board took the 1959 amendment into account as it set the MPMCD water-right and the Board determined that Reclamation and MPMCD had provided the economic justification for the 45,000 acre-feet application for a water-right. Verbatim transcript of the meeting of the Oklahoma Water Resources Board (the governing Board) of October 10, 1967 (Transcript prepared by Joan Wilkerson) (*passim*). In other words, the author

Any amount of water in the Reservoir above that 45,000 acre-feet would be, under the language quoted from the 1959 statute, "subject to general appropriation by State law."[71]

Third, if MPMCD were to interpret the statutory words "required in connection with such plans" to mean to the top of the conservation pool, such interpretation presents issues about properly interpreting Section 8 of the Reclamation Act. Section 8 defers to the laws of the State of Oklahoma to create and to define the water rights for Reclamation projects. As discussed in Chapter 2, the Supreme Court and other case law has adopted this "state-preferred" interpretation of Section 8. And, OWRB has consistently interpreted Okla. Stat. Tit. 82 § 91 contrary to the possible argument for a top-of-the-conservation-pool water right. In addition, the Reclamation Act Section 8 proviso provides that "beneficial use shall be the basis the measure, and the limit of the right." Protecting the identified beneficial use (45,000 acre-feet average annual yield required to produce the firm yield of 16,100 acre-feet) for municipal, industrial and irrigation purposes with water simply sitting in storage is arguably not itself a beneficial use. Oklahoma stream water law and prior appropriation law generally distinguishes between storage rights and

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concludes that, regardless of the legal issue about applying the 1959 statute retroactively, the Board, Reclamation, and MPMCD did comply with and fulfill the statutory requirements of the 1959 amendment.

OWRB might also point to the 1967 amendments to Section 91 on Reclamation withdrawal that imposed additional procedural obligations related to Reclamation withdrawal and required an OWRB Board decision that the withdrawal is "in harmony with the best interests of the State." Okla. Stat. Tit. 82 § 91 (1970 Supp.) The effective date of the 1967 amendments was May 23, 1967 – a date that is three months prior to MPMCD's application for water rights on August 29, 1967. However, this author considers that OWRB issued an "in harmony with the best interests of the State" determination in 1964 when OWRB commented on Reclamation's Revised Plans June 1963. Letter of Henry Bellmon, Governor to the Secretary of the Interior (March 5, 1964) at pp. 4-6. Moreover, OWRB granted MPMCD's stream water permit in October 1967 after the effective date of the 1967 amendments. Hence, the author concluded that OWRB's 1964 comments and the 1967 permit constitute a legal recognition that Reclamation and MPMCD satisfied the 1967 amendments. By satisfying the 1967 amendments, the author considers the issue of prospective or retroactive application of the 1967 amendments to be moot.

[71] Okla. Stat. Tit. 82 § 97 (1959 Supp.).

beneficial use rights. Hence, OWRB could argue that protection for an additional 43,400 acre-feet is a violation of MPMCD's fiduciary duty to manage its storage right to prevent waste and in anticipation of others' future beneficial uses. In other words, if MPMCD were to claim a water right to the top-of-the-conservation-pool, such interpretation may run counter to fundamental water law principles, articulated in both Section 8 of the Reclamation Act and various Oklahoma statutes and regulations governing Oklahoma stream water law, about the beneficial use of water in the prior appropriation legal system for stream water.

c. Additional stream water rights for Mountain Park Master Conservancy District

The author begins this discussion of additional water rights for MPMCD by emphasizing that these are additional water rights. These additional water rights are separate and distinct from, and additional to, the water rights that MPMCD holds under its present Permit 67-671. These additional rights do not in any way undermine MPMCD's Permit 67-671 water right and its priority date based on the Reclamation withdrawal of water in 1955. Rather, these additional water rights would have there own priority date based on the manner of obtaining the additional water rights.

Under Oklahoma law, MPMCD has the statutory right to apply for a water right.[72] In the interest of protecting its permitted and clarified (quantified) water rights, MPMCD might well consider applying for new, additional water rights in all unappropriated water[73] in Otter and Elk

[72] Okla. Stat. Tit. 82 §§ 105.9 to 105.11 (2011).

[73] The author emphasizes that MPMCD would be applying for all unappropriated water in Otter Creek and Elk Creeks. MPMCD would not be applying for a specific quantity of water but rather "all unappropriated waters" whatever that quantity might be year-to-year and however that variable quantity might be estimated using OWRB formulas or Reclamation surface water modeling.

Creeks for the purposes of recreation, fish and wildlife purposes. These "unappropriated" recreation, fish, and wildlife water rights are completely distinct and separate from the Reclamation "plan" recreation, fish, and wildlife water rights discussed in Part II(a) above with regards to quantifying MPMCD's water rights under its present permit.

As recreation, fish and wildlife are beneficial purposes under Oklahoma law, MPMCD gains several advantages if it were granted water rights in all unappropriated waters in Otter and Elk Creeks upstream from the Tom Steed Reservoir. MPMCD gains these advantages even though MPMCD would have the most junior water right on Otter and Elk Creeks as the new water right would have the priority date as of the date of application.[74] As MPMCD would be seeking a new water right, MPMCD would not be able to claim a priority date based on the Reclamation withdrawal notice of May 4, 1955.

First, MPMCD would no longer face the worry that persons upstream might apply for and receive newly permitted prior appropriation rights.[75] MPMCD is in a much better legal position by itself having the most junior water rights in all unappropriated water in its reservoir

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The author acknowledges that the statutory language about granting a water permit may not allow a water permit for "future availability" of water. Under present practice and formulas, OWRB grants permits for "unappropriated water" presently existing in the stream. Thus, it may be that the Districts would apply for a new additional water right in the "all unappropriated water" not upstream but in the Reservoirs themselves when the Reservoirs are full – to the top of the conservation pool.

[74] Okla. Admin. Code § 785: 20-1-2 (Definition of "Priority") and § 785: 20-7-1(g) (2014).

[75] OWRB and Reclamation prepared a hydrological model for the Tom Steed Reservoir that models the impacts of future junior stream water permits upon the water supply of the reservoir. Results show that full development of junior stream water permits could have a significant detrimental impact on the water supply of Tom Steed Reservoir. Reclamation and OWrB, *Upper Red River Basin Study: Impacts of Status Quo Management on Water Availability in the Tom Steed Reservoir Hydrologic Basin* (Draft April 2019) at p. 28 "Results Summary" bullet points 3 and 5. [hereafter cited as TS Status Quo Water Availability].

drainage basins than in having other, new non-MPMCD water-right holders in the Tom Steed Reservoir watersheds. After all, if MPMCD had the most junior water right for all unappropriated water, MPMCD would not have to sue itself in order to protect its senior water-right (Permit 67-671) during times of drought. If other non-MPMCD water-right holders were to come into existence, MPMCD would have even a greater number of junior water-right holders against whom MPMCD would have to seek interference protection in times of drought.[76]

Second, MPMCD might face little opposition to its application for all unappropriated waters in Otter and Elk Creeks above Tom Steed Reservoir for two reasons.

1) In the Oklahoma Comprehensive Water Plan (OCWP), OWRB concluded that the basins upstream from Tom Steed Reservoir do not have any stream water available for new regular prior appropriation permits.[77] Consequently, nobody should be thinking about applying for a water right on Otter and Elk Creeks.[78] And, although it may sound contradictory to say that MPMCD can apply for water rights in all unappropriated waters when the OCWP says no unappropriated waters exist, MPMCD sensibly could argue that granting it a water permit in all unappropriated waters of these two creeks legally effectuates closure of the basins in conformity with the OCWP. Moreover, the OCWP closure appears related to consumptive uses of the

[76] As to what protections MPMCD might be able to seek to protect its senior water-right (Permit 67-671), the author will discuss these issues in Part III of this chapter.

[77] OCWP, *Southwest Watershed Planning Region* (no date) at p. 11. [hereinafter cited, OCWP Southwest].

[78] Personal communication from OWRB indicates that, in fact, there is at least one outstanding application on Elk Creek upstream from Tom Steed Reservoir despite the OCPW finding that no water exists for new regular prior appropriation permits. But even if OWRB granted this one application ahead of MPMCD's application for all unappropriated waters, only one additional upstream permit has less of an impact on the water supply for Tom Steed Reservoir than the possibility of many additional non-MPMCD water-right holders.

waters of these creeks whereas MPMCD would be applying for non-consumptive beneficial uses for recreation, fish, and wildlife. Granting MPMCD a permitted water right for all unappropriated water rights on Otter and Elk Creeks for non-consumptive beneficial uses thereby legally precludes OWRB from granting any additional consumptive use water rights on those two creeks. Once MPMCD has a water right in all unappropriated waters on Otter and Elk Creeks, there literally is no unappropriated water remaining for which anybody could apply for a prior appropriation.[79]

2) Other existing senior and junior prior appropriators on Otter and Elk Creek also benefit if MPMCD has a water right in all unappropriated waters of these two creeks. Existing senior and junior prior appropriators already have unstable and unpredictable water rights on Otter and Elk Creeks. Any additional consumptive water rights, even though junior to existing water rights, would increase the instability of these senior water rights.[80] Consequently, what is good for MPMCD in gaining a prior appropriation in all unappropriated waters turns out to be good for the existing senior and junior water rights holders also. Existing senior and junior water-right holders on Otter and Elk Creek thus are likely to support MPMCD's application or to refrain from protesting MPMCD's application.

[79] Okla. Stat. Tit. 82 § 105.12(A)(1) (2011). (OWRB cannot grant a regular permit for water unless the evidence shows that there is unappropriated water available.)

[80] When thinking of additional consumptive water rights, the textual discussion focuses on stream water prior appropriations. This Chapter does not discuss domestic stream water rights or Oklahoma riparian water rights coming from the Oklahoma Supreme Court decision of *Franco-American Charolaise Ltd. v. Oklahoma Water Resources Board*, 1990 OK 44, 855 P.2d 568 (Okla. Consumptive use from domestic or riparian claims also contribute to instability and uncertainty in water supply and water rights, though their magnitude is generally considered to be minimal.

Third, MPMCD has a schedule of use in its permit, P67-671. As presently stated, MPMCD's schedule of use shows that 14,190 acre-feet per year (88%) would be used by the year 2020 and that 16,100 acre-feet per year (100%) would be used by the year 2030.[81] Hence, under Oklahoma law, MPMCD faces the possible reduction of its core water rights under the "use it or lose it" principle of prior appropriation water law.[82] By gaining a water right for non-consumptive uses of water for recreation, fish, and wildlife in all remaining unappropriated waters of Otter and Elk Creeks above Tom Steed Reservoir, MPMCD mitigates this risk. If MPMCD lost some amount of acre-feet from its core water rights, existing junior appropriators upstream or downstream from Tom Steed Reservoir would have a claim to the "lost" water that now, once again, belongs to the stream system. But this loss would be offset by the inflow of the newly granted non-consumptive MPMCD water rights for recreation, fish, and wildlife. Furthermore, if MPMCD has water rights in all unappropriated waters from Otter and Elk Creeks, MPMCD has precluded any additional juniors coming into existence to make a claim for "lost" water. In other words, by having a new water right for non-consumptive purposes of recreation, fish, and wildlife, MPMCD, in practical terms, converts its potential "lost" water into its permitted non-consumptive water right for recreation, fish and wildlife.

Fourth, if MPMCD obtained a water right in all unappropriated waters upstream of Tom Steed Reservoir on Otter and Elk Creeks, MPMCD would have a vested water right in all water

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[81] Permit No. P67-671 (Schedule of Use) (May 6, 1991).

Reclamation projected the populations of Altus, Frederick, Tipton and Snyder to equal 35,300 in the year 2010. ReconnReport MPP at pp. 10-13. Census figures for 2010 show the population for these four municipalities equaled 26,018.

[82] Okla. Stat. Tit. 82 §§ 105.17 & 105.18 (2011).

in the reservoir. In other words, MPMCD's control over the water in storage in Tom Steed Reservoir would thereafter be a vested water right, not just a storage right. The immediate consequence of having a vested water right in all water in Tom Steed Reservoir would be that nobody else could apply for a water permit in "excess" water in storage.[83] There would be no "excess" water in storage; all water in storage would be permitted water rights held by MPMCD. MPMCD would be the master of the waters in Tom Steed Reservoir.[84]

Reclamation and MPMCD might consider a second, alternative approach to securing additional, new water rights for MPMCD for recreation, fish and wildlife purposes. In the 1968 legislation authorizing the MPP, Congress expressly stated that the MPP could engage in activities "conserving and developing fish and wildlife resources, providing outdoor recreation opportunities ..."[85] In 1994, Congress expanded the authority of MPP to include "environmental quality activities."[86]

In light of these 1968 and 1994 enactments, Reclamation has the authority to seek new water for recreation, fish, wildlife and environmental quality for the MPP. Using this authority, Reclamation could provide a new, additional withdrawal notice to OWRB for all unappropriated

[83] Okla. Stat. Tit. 82 § 105.21 (Surplus Water) (2011).

[84] *See*, Okla. Att'y Gen. Op. 71-280 (Dec. 30, 1971) (opinion relating to interpretation of the "excess" or "surplus" water statute of Oklahoma cited in the preceding footnote.) *Cf. also, Wagoner County Rural Water District No. 2 v. Grand River Dam Authority*, 2010 OK CIV APP 95, 241 P.3d 1132; *Rural Water, Sewer and Solid Waste Management District No. 1 Logan County v. City of Guthrie*, 2014 OK CIV APP 48, 325 P.3d 1.

[85] Public Law 90-503, 82 Stat. 853 (Sept. 21, 1968).

[86] Public Law 103-434, 108 Stat. 4536 (Oct. 31, 1994).

waters in the Otter Creek and Elk Creek basins above the Tom Steed Reservoir.[87] By giving a withdrawal notice, Reclamation and MPMCD gain the date of the notice as the priority date, have three years to develop a plan for these non-consumptive uses at Tom Steed Reservoir and eight years to complete the project from the date of filing the plans with OWRB. With Reclamation's plans in hand, MPMCD could then make the formal application for a new, additional water right for recreation, fish, wildlife, and environmental quality that Oklahoma now recognizes as beneficial uses of water.

III. PROTECTING THE STREAM WATER RIGHTS OF MOUNTAIN PARK MASTER CONSERVANCY DISTRICT.

The prior appropriation system of water law has a foundational principle: "first in time is first in right." OWRB has adopted this foundational principle in its regulations: "... Among regular permit holders, priority in time, determined by date of filing an application as provided in these rules, shall give the better right."[88]

MPMCD has a clearly recognized priority date of May 5, 1955 when Reclamation provided notice to the State of Oklahoma seeking the withdrawal of specified waters.[89] OWRB's Final Order No. 4 (14 July 1964) on vested stream water rights in the entire North Fork Red

[87] Okla. Stat. Tit. 82 § 105.29 (2011). Reclamation would have to comply with significant procedural obligations as set forth in § 105.29 (2011).

[88] Okla. Admin. Code § 785: 20-7-1(g) (2014).

[89] *Oklahoma Water Resources Board v. Foss Reservoir Master Conservancy District*, 1974 OK 113, 527 P.2d 162. In this case, the Supreme Court of Oklahoma ruled explicitly that the Foss Master Conservancy District had a seniority date (a priority date) for its water rights as of the date of the Reclamation notice withdrawing the specified water from further appropriation under the Oklahoma federal withdrawal statute. MPMCD's water rights clearly come within the ruling of this 1974 Supreme Court decision concerning Foss Reservoir.

River Stream System listed forty-nine water rights prior to MPMCD's priority date and thirty water rights junior to MPMCD's priority date. And, obviously, MPMCD's priority date is senior to all other Otter Creek and Elk Creek water rights that OWRB has granted since 14 July 1964. When Reclamation, OWRB and MPMCD modeled the hydrology of Tom Steed Reservoir, OWRB records showed six upstream senior permits (1856 acre-feet permitted) and five upstream junior permits (2700 acre-feet permitted).[90] In other words, MPMCD has a priority that makes its stream water rights – both the core water right for municipal and industrial purposes and the clarified (quantified) water right for "plan" recreation, fish and wildlife purposes – senior to many competitors for water rights on Otter and Elk Creeks. Of course, these MPMCD senior water rights must be distinguished from the MPMCD junior water right in all unappropriated waters in Otter and Elk Creeks, if MPMCD were to apply for and obtain a new water right for recreation, fish, and wildlife purposes.

With this information about MPMCD's priority status, the author turns to discuss how MPMCD can protect its senior stream water rights.

a. Protecting senior stream water rights from interference by junior stream water rights.

Oklahoma statutes only provide one explicit enforcement mechanism to OWRB to use to protect a senior water-rights holder from a junior water-rights holder. In Okla. Stat. Tit. 82 § 105.20 **Violation**, the unauthorized use of water (i.e. the use of water in violation of the priority

[90] TS Status Quo Water Availability April 2019 at p. 25, Table 6.

The author acknowledges the differences between the OWRB Final Order No. 4 and the OWRB records used for modeling. However, the author does not think the differences between Final Order No. 4 and the OWRB records (nor an explanation of how to reconcile the differences) changes the legal analysis and interpretation presented in this Chapter 3. Therefore, while the differences are acknowledged, the author does not further pursue these differences or their reconciliation. See similar comments in footnotes 19 and 20 above in this chapter..

between water users) is declared a misdemeanor and subject to civil injunction.[91] Senior water rights holders can activate § 105.20 by filing a complaint with the OWRB which initiates an investigation and requires the OWRB to respond as to the appropriate action to take.[92] In addition to OWRB action, individual water rights holders can bring their own law suits to protect their water rights.[93] So, MPMCD can file a complaint with OWRB or bring its own law suit to protect its senior water rights. But as Oklahoma water law history indicates, rarely does anyone invoke either of these two statutes for enforcement of water rights. Criminal actions, civil injunctions or private law suits certainly have an enforcement role, but these methods are costly, time-consuming, and, most importantly, very likely to be too slow and too ineffective in actually protecting a senior stream water right from interference.

The Legislature has granted the OWRB expansive powers over the waters of the state. In accord with Okla. Stat. Tit. 82 § 1085.2, OWRB has the authority:

> "1. Generally to do all such things as in its judgment may be necessary, proper or expedient in the accomplishment of its duties; ...
> 7. To promulgate such rules and make orders as it may deem necessary and convenient to the exercise of any of the powers or the performance of any of the duties conferred on imposed upon it by this or any other law;
> 8. To institute and maintain, or to intervene in, any actions or proceedings in or before any court, board, commission or officer of this or any other state or the United States to stop or prevent any use, misuse, appropriation or taking of any of the water of this state which is in whole or in part in violation of any law, or any rules, orders, judgments or decrees of any court, board ..."

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[91] Okla. Stat. Tit. 82 § 105.20 (2011). Section 105.20 ends with this sentence: "The Board and its authorized agents shall have a reasonable right to go upon private property in the performance of their duties hereunder and shall have the duty to file complaints of violations of the penal provision of this section."

[92] Okla. Admin. Code § 785: 1-11-1 (2014).

[93] Okla. Stat. Tit. 82 § 105.5 (2011).

OWRB has used this broad authority to impose conditions upon water rights at the time of application and after issuance of a permit, when necessary to promote beneficial use of Oklahoma water.[94] Similarly, OWRB might be able to use this broad authority to create an administrative procedure to prevent or to stop a junior stream water-rights holder from interfering with a senior stream water right. If OWRB were to create such an administrative procedure, what might the administrative procedure contain?

The author believes that OWRB has the authority to adopt regulations that are specific to situations that are most likely to present issues regarding the protection of senior stream water rights. In other words, the author believes that OWRB does not have to adopt regulations about interference by junior stream water rights that are applicable statewide and in every conflict situation between seniors and juniors.[95] Most importantly for Tom Steed Reservoir, the author believes that OWRB has the authority to draft regulations specific to the water rights of MPMCD.

Focusing on MPMCD and its water rights, OWRB could identify interference triggers to write into its regulations.[96] OWRB could then use these triggers to take administrative action to

[94] *See*, Okla. Att'y Gen. Op. 72-253 (Jan. 12, 1973) (affirming that OWRB can impose time-of-use conditions upon regular permits for water.)

[95] OWRB may well be wise to leave disputes between most individual water-right holders to those individuals themselves through the filing of private litigation under Okla. Stat. Tit. 82 § 105.5 (2011).

[96] In adopting regulations about interference, OWRB must comply with the Oklahoma Administrative Procedures Act and other statutes governing the adoption of regulations. The author does not address these procedural requirements for the valid adoption of regulations.

protect senior stream water rights held by MPMCD. OWRB could draft an interference chapter for its regulations that is specific to MPMCD and its senior stream water right.[97]

MPMCD could propose one trigger for OWRB enforcement – the top of the conservation pool (i.e. any amount of water in the Reservoir below the top of the conservation pool would trigger OWRB action against junior water-right holders). The author believes this top-of-the-conservation pool trigger may too often burden junior stream water rights and do so in too precautionary a manner contrary to the principle of maximization of beneficial use. Furthermore, adopting this proposed trigger would effectively grant MPMCD a water right to the top-of-the conservation pool. As discussed earlier in this chapter, the author does not believe that MPMCD has a water right to the top of the conservation pool. Furthermore, if MPMCD were to apply for and receive a new water right for all unappropriated waters on Otter and Elk Creeks above the Tom Steed Reservoir [discussed in Part II.c], the adoption of this proposed trigger would effectively turn MPMCD's most junior water right on these two streams into a senior water right. OWRB could not be amenable to the violation of a foundational principle of

[97] The author envisions an OWRB chapter on interference specific to MPMCD's senior water right. MPMCD could invoke the procedures of this specific chapter. Indirectly, other water-right holders senior to MPMCD also would benefit from this interference chapter because when MPMCD takes action to preclude juniors from taking water from Otter Creek and Elk Creek, all seniors on those two streams would benefit.

Reclamation, OWRB and MPMCD have developed a document for Tom Steed Reservoir about drought indices and triggers. Reclamation and OWRB, Upper Red River Basin Study: Formulation of Curtailment Alternatives in the Tom Steed Reservoir Hydrologic Basin (Draft, January 2021 [hereinafter cited as TS Curtailment Analysis, 2021]

Additional modeling of groundwater and stream water interconnections that identifies specific wells as having the most impact on base flow and inflow might also assist OWRB, MPMCD and Reclamation in developing interference triggers. The United States Geological Service (USGS) has presented such a project proposal to Reclamation for modeling that would undertake to identify the impact of specific, identified wells on base flow and the inflow in the catchment basins providing water to Fort Cobb Reservoir. USGS, *Simulated Effects of Groundwater Withdrawals on Streamflow Depletion in the Rush Springs aquifer upgradient from Fort Cobb Reservoir, western Oklahoma* (April 3, 2020). [hereafter USGS Simulated Effects April 2020].

prior appropriation law – priority (seniority) gives the better right.[98] Water-right holders junior to MPMCD's Permit 67-671 water rights are still entitled to their seniority and their beneficial uses of the waters of Otter and Elk Creeks over any new MPMCD water right for all unappropriated waters on these two streams.

In crafting regulations to protect MPMCD's senior water rights, OWRB would consider factors affecting the water supply – such as the hydrological factors that OWRB takes into account in making a determination whether or not unappropriated water is available in a stream when an applicant applies for a regular water permit.[99] OWRB lists these specific factors as mean annual precipitation run-off in the watershed above the point of diversion, existing appropriations, other designated purposes (e.g. Interstate Compacts), dependable yield from a reservoir or pond, and Board review of proposed present and future needs.[100] By focusing on hydrological factors and dependable yield from the reservoir, OWRB could craft interference regulations specific to MPMCD's senior water rights that clearly and directly reflect protections for the water supply of Tom Steed Reservoir. By focusing on hydrological factors and dependable yield from the reservoir, OWRB also could identify an interference trigger that does not too often burden junior water-right holders and that promotes the maximization of beneficial uses for all water-right holders on Otter and Elk Creeks.

[98] Okla. Admin. Code § 785: 20-7-1(g) (2014) (priority among classes of permit holders).

[99] Okla. Stat. Tit. 82 § 105.12(A) (2011).

[100] Okla. Admin. Code § 785: 20-5-5 (2014).

In January 2021, Reclamation, OWRB and MPMCD collaboratively prepared an analysis[101] of drought indices and triggers related to Tom Steed Reservoir that stated its goals as:

> 1. Protect reservoir dependable yield during drought periods while attempting to maximize beneficial use within the basin.
> 2. Identify and evaluate a range of 'triggers" to curtail junior surface water rights during "droughts." Triggers should be based on a combination of one or more Local Drought Indicators (LDIs) and Regional Drought Indicators (RDIs).[102]

This analysis conducted jointly by Reclamation, OWRB and MPMCD provides the hydrological and reservoir storage level information that OWRB could consider in adopting regulations specific to Tom Steed Reservoir. OWRB could consider these analyses and, based on comments and evidence received in hearings to develop the interference regulations, select the precise triggers that OWRB determines both protects the MPMCD's senior water rights and maximizes beneficial use in the Otter and Elk Creek basins. Of course, OWRB's choice of the precise triggers depends upon the specific local and regional drought indicators selected and on the actual quantity of MPMCD's defined senior water rights. In the author's opinion, if OWRB adopted interference regulations based on hydrological factors (drought indicators) and defined senior water rights (dependable yield), OWRB would be taking actions based on hydrology and science and which are consistent with Oklahoma stream water law.

Once OWRB adopted interference regulations specific to Tom Steed Reservoir, OWRB could also create an administrative procedure to enforce these interference regulations. For example, based on drought indicators and reservoir levels, OWRB could give junior stream

[101] TS Curtailment Analysis, 2021.

[102] TS Curtailment Analysis, 2021 at p. 1.

water-right holders advanced warning that drought conditions are approaching the trigger point. When the trigger point arrives, OWRB could notify the juniors to cease using stream water so as to protect MPMCD's senior stream water rights.[103]

As explained above, OWRB has the delegated authority to protect senior stream water rights. Adoption of interference regulations specific to Tom Steed Reservoir is within OWRB's power to protect senior stream water rights. Hence, OWRB does not need to rewrite the permits of junior stream water-right holders. Junior stream water rights by being junior are always subject to curtailment to protect senior stream water rights. And, when OWRB adopts these interference regulations for Tom Steed Reservoir, OWRB could choose a trigger that indicates that all juniors need to cease taking water from Otter and Elk Creeks. By so doing, when the trigger point arrives for protection of MPMCD's senior rights, OWRB can order all juniors to stop without OWRB being required to begin with the most junior and work backward to the most senior junior.[104] In other words, OWRB can select a trigger point that would apply to all juniors collectively without violating the "first-in-time first-in-right" principle of prior appropriation water law. Moreover, by OWRB adopting triggers, based on hydrology and dependable yield,

[103] In protecting MPMCD's senior water rights, OWRB, MPMCD, and Reclamation would assuredly work together to manage the water supply. Aside from brief mention in the text to raise management issues, this academic study focused on legal rights is not the proper place to discuss these management decisions.

[104] Compliance by juniors with the order to cease using water is a distinct issue from the adoption of regulations and enforcement procedures when the trigger point arrives. This academic study is not the proper place to discuss these compliance issues. *But see,* Okla. Stat. Tit. 82 § 105.20 (2011) and the text accompanying fn. 92 above in this chapter.

that apply to all juniors collectively, OWRB may be able to avoid junior stream water-right holders arguing the "futile call" doctrine when a senior claims interference.[105]

If OWRB were to adopt interference regulations for Tom Steed Reservoir, OWRB would likely also need to address the endpoint of interference. When does the interference come to an end so that juniors may once again take water from Otter and Elk Creeks? By contrast to the trigger for invoking the interference regulation, when MPMCD might be worried about OWRB acting too slowly to declare interference, MPMCD might be worried about OWRB acting too quickly to declare interference at an end. The author believes that OWRB would likely choose the endpoint of interference based on hydrological factors (drought conditions) and defined senior water rights (dependable yield) that indicate that protection for senior stream water rights is no longer justified. OWRB can do so by relying upon modeling analysis such as the Reclamation/OWRB/MPMCD analysis of Tom Steed.[106] While the author does not believe that OWRB must choose the identical trigger for initiating the interference regulation as for ending the interference regulation, OWRB must choose the ending trigger point so as to be defensible both in hydrology and Oklahoma stream water law.

The author would summarize the key points for the development of interference regulations as follows:

OWRB could use hydrological information (drought conditions and reservoir level) and defined water rights (dependable yield) specific to Tom Steed Reservoir so as to both protect

[105] For a brief discussion of the "futile call" doctrine, D. Getches, WATER LAW IN A NUTSHELL (4th ed. 2009) at pp. 110-111.

[106] TS Curtailment Analysis, 2021.

senior stream water rights from interference while maximizing beneficial use for the all water-right holders on Otter Creek and Elk Creek. If OWRB develops interference regulations based on this approach, as exemplified by the Reclamation/OWRB/MPMCD analysis of Tom Steed Reservoir, the author believes that OWRB would have defensible interference regulations in hydrology and in Oklahoma stream water law.

b. Protecting Regular Permits from Seasonal, Temporary, Term, and Provisional Permits

In 1972, the Legislature enacted the following statutory language:

> "[OWRB] is authorized to issue, in addition to regular permits, seasonal, temporary, term, or provisional temporary permits at any time the Board finds such issuance will not impair or interfere with domestic uses or existing rights of prior appropriators and may do so even when it finds no unappropriated water is available for a regular permit. All seasonal, temporary, term and provisional temporary permits shall contain a provision making them subject to all rights of prior appropriators. ..."[107]

From the statutory language, OWRB's authority to grant non-regular permits is discretionary and each non-regular permit must make them subject to all rights of prior appropriators. MPMCD complained that OWRB continued to grant non-regular permits, during the drought of 2010 to 2015, even though, according to MPMCD, those non-regular permits were impairing and interfering with its senior water rights.

If OWRB adopted interference regulations specific to Tom Steed Reservoir, as discussed above in Part III.a, OWRB could also address interference by non-regular permits with regular permits. OWRB could decree that the interference trigger selected for protecting senior water rights from junior water rights would also apply to protect regular permit water rights from non-

[107] Okla. Stat. Tit. 82 § 105.13.A (2011).

regular permits. OWRB could choose the same trigger point based on the same hydrology and reservoir levels because the drought conditions are such that any further removal of water from the Otter Creek and Elk Creek basins would interfere with and impair MPMCD's vested water rights. By adopting the identical interference trigger for non-regular permits, OWRB would be constraining its discretion to grant non-regular permits in the Otter Creek and Elk Creek basins and making effective the mandatory provision that non-regular permits are subject to all prior appropriations. As shown by the granting of non-regular permits during the 2010-2015 drought, MPMCD appears to have a legitimate complaint that its senior stream water right under Permit 67-671 was protected on paper (i.e. on the priority lists in the files of OWRB), but not in the reality of water supply management under drought conditions.

OWRB could also adopt the identical end point for interference so that OWRB regains its discretion to grant non-regular permits in Otter Creek and Elk Creek basins. When the need for protection ends, non-regular permit applicants should have access to water so as to maximize the beneficial use of Oklahoma's stream waters

OWRB has another reason to use interference regulations to reduce the discretionary grant of seasonal, temporary, term and provisional permits. OWRB has recently adopted regulations allocating ownership rights in brackish groundwater[108] to surface landowners

[108] Okla. Stat. Tit. 82 § 1020.1(2011 provides the following definition: ""Fresh water' means water which has less than five thousand (5,000) parts per million total dissolved solids. For the purpose of this [Groundwater Law] all other water is salt water."
Brackish water has between 5,000 and 10,000 ppm of total dissolved solids.

overlying the brackish aquifer.[109] Surface owners can grant leases to companies, particularly oil and gas companies, for the use of their brackish groundwater. With a valid lease from surface owners, oil and gas companies can then apply to OWRB for a provisional temporary groundwater permit.[110] Once these regulations become legally effective, MPMCD can urge OWRB to grant provisional temporary groundwater permits from brackish aquifers having no impact on the surface streams in the MPMCD catchment basin, rather than provisional temporary permits from the surface streams themselves or fresh water aquifers interconnected to these surface streams.

c. Dry-Year Option -- Non-regulatory protection for stream water right(s)[111]

Thinking in terms of water law management in western states, MPMCD might consider alternative methods of protecting its water right(s).[112] For example, MPMCD might consider an alternative transfer method commonly called a "dry-year option." A dry-year option is: "A long-term lease agreement that maintains water in the original use in most years, but provides an intermittent water supply to other uses under preset conditions."[113]

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[109] Okla. Admin. Code (Proposed Regulations) 785:30-5-10 Marginal Water Permits (2020). *See*, J. Mooney, *'Marginal' water eyed for wider use*, The Oklahoman at A12 (Feb. 19, 2020). These proposed OWRB regulations are not yet legally effective because the Legislature and Governor must still approve.

[110] Okla. Stat. Tit. 82 § 1020.10 (2011 (authorizing provisional temporary groundwater permits).

[111] MPMCD has a water right under Permit 67-671. MPMCD may acquire a new, additional water right for all unappropriated water. Hence, the author used the word "water(s)" in this heading about non-regulatory protection.

[112] *E.g.*, Environmental Defense Fund, *Alternative Water Transfers in Colorado: A Review of Alternative Transfer Mechanisms for Front Range Municipalities* (Nov. 2016) [hereinafter cited EDF Alternatives]; J. King & J. Ecklund, *Water Transfer Options*, THE WATER REPORT (Issue 172, June 15, 2018).

[113] EDF Alternatives at p. 13, Table 1 (classifies dry-year options as an "interruptible water supply agreement.")

Junior water-right holders could consider long-term lease agreements with senior water-rights holders on Otter and Elk Creeks in which the seniors would refrain from taking water under the preset condition of, as an example, OWRB invoking the interference regulations. MPMCD is a junior water-right holder to those prior appropriators who have a priority date before the Reclamation withdrawal notice of May 1955. For example, if MPMCD had entered a lease for these senior water rights in drought and declining-reservoir-level years, MPMCD would have additional inflows to the reservoir that would provide increased protection for its municipal, industrial and "plan" water rights. MPMCD and the senior water-right holders would voluntarily enter into these dry-year option leases.

Several attributes of these dry-year option leases appear to exist. First, by being a voluntary, temporary transfer of water rights (as opposed to permanent transfer of a water right), statutes applicable to permanent transfers or change in beneficial purposes of permitted water rights do not apply.[114] Second, nobody should have standing to object to a senior voluntarily refraining to take water from the stream. Seniors not entering dry-year option leases still get to take their water in accord with their priority date. Juniors to MPMCD would not have a legal basis to complain because MPMCD is capturing this water for its water right senior to those of the juniors. Third, MPMCD can write the terms of the lease so that the lease operates for only six continuous years so that the senior does not lose its senior water right.[115]

[114] Okla. Stat. Tit. 82 § 105.22 (Severance and transfer of water right) & § 105.23 (Uses of water for other purposes) (2011).

[115] Okla. Stat. Tit. 82 § 105.17 (2011) (a water-right holder loses the water right if "for a period of seven (7) continuous years" the water-right holder does not appropriately use a permitted water right.)

Of course, MPMCD also would likely need to consider several complications relating to dry-year option leases to protect its water rights. First, MPMCD would want to consider whether the cost of leasing the water is a sensible economic investment for a sensible price. Second, MPMCD would need to take into account the transaction costs of negotiating and maintaining these lease agreements, including renegotiating leases at the end of the six-year term. Third, MPMCD should determine whether dry-year option leases would result, in fact, in additional inflows into the Tom Steed Reservoir. MPMCD may not want to pay for water that does not physically materialize in the Reservoir; in other words, MPMCD may not want to pay for "paper" water.[116]

IV. MOUNTAIN PARK STREAM WATER RIGHTS AND GROUNDWATER

a. Oklahoma Groundwater Law and Tom Steed Reservoir

The Oklahoma Comprehensive Water Plan correctly and succinctly states, "With the exception of the Arbuckle-Simpson aquifer system, conjunctive management of supplies is not mandated under Oklahoma water law."[117] Expanding the meaning of this quoted sentence, Oklahoma water law mandates public sovereignty of water in definite streams (prior appropriation)[118] and, concurrently, mandates private ownership of groundwater (allocated

[116] MPMCD may have an easier task of evaluating the practical feasibility of dry-year-option leases than many dry-year option projects because the Reclamation/OWRB/MPMCD analysis indicates that there are only six upstream senior permits with 1856 acre-feet permitted and 1233 acre-feet estimated consumption. TS Status Quo Water Availability, 2019 at p. 25, Table 6.

[117] OWRB, Oklahoma Comprehensive Water Plan 2011 Update: Technical Memorandum: Conjunctive Water Management in Oklahoma and Other State (Nov. 2010) at p. 4 [hereinafter cited TechMemo Conjunctive Water Management].

[118] Okla. Stat. Tit. 82 §§ 105.1 through 105.33 (Stream Water Use) (2011).

ownership to landowners overlying an aquifer).[119] Applying these two preceding sentences to MPMCD means that OWRB manages MPMCD's vested rights in the stream waters of Otter and Elk Creeks independently and separately from overlying landowner groundwater rights in the alluvial and bedrock aquifers of the Otter Creek and Elk Creek catchment basins. OWRB properly follows Oklahoma water law for independent and separate management of surface water and groundwater even though OWRB also acknowledges:

> "... water resources may be hydraulically connected and the uses of each can affect the other water resource. In other words, the pumping of groundwater could have an effect on a stream if the aquifer and stream are hydraulically connected. Likewise, the diversion of surface water could also have an effect on the aquifer's long-term water supply."[120]

To the author's knowledge, there are two possible legal arguments to reclassify certain, specified Oklahoma groundwater (i.e. water under the surface of the earth) as stream water. If these certain, specified waters were, in Oklahoma law, stream waters, OWRB would then be mandated to manage these reclassified waters using Oklahoma's prior appropriation laws. Note that this reclassification of certain, specified Oklahoma groundwater as stream water would not mean that OWRB is engaged in conjunctive management of stream water and groundwater. Rather, this reclassification simply would move certain, specified Oklahoma groundwater from management under the groundwater laws to management under the stream water laws.

The two possible legal arguments are:

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[119] Okla. Stat. Tit. 82 §§ 1020.1 through 1020.22 (Oklahoma Groundwater Law) (2011). In § 1020.1 **Definitions**: "'Groundwater' means fresh water under the surface of the earth regardless of the geologic structure in which it is standing or moving outside the cut bank of any definite stream."

[120] TechMemo Conjunctive Water Management at p. 4.

1) The Legislature impermissibly moved alluvial waters from being public waters to private ownership waters in 1967 and 1972 amendments to Oklahoma's water laws – the alluvial waters argument.[121]

2) Oklahoma water law could make a distinction between gaining streams (groundwater movement) and losing stream (stream water movement) – the losing stream argument.[122]

If alluvial waters and losing stream waters were reclassified as stream water under Oklahoma water law,[123] MPMCD gains several advantages. First, MPMCD has stream water rights that date from May 4, 1955 when Reclamation gave notice of the withdrawal of specified waters on Otter Creek and Elk Creek for the Mountain Park Project. By having a May 4, 1955 priority date, MPMCD has senior rights over most competing claimants to the waters of Otter and Elk Creeks. Assuredly MPMCD would have seniority over the vast majority of groundwater

[121] For discussion of the alluvial waters argument, read Chapter 2 OKLAHOMA LAW, Ground water defined, especially the text accompanying footnotes 128-134.

[122] Gaining streams are gaining waters from the surrounding groundwater aquifer whether an alluvial aquifer or a bedrock aquifer or both. Losing streams are losing waters to the surrounding groundwater aquifers. Under Oklahoma water law, as soon as the water from a losing stream moves past the cut bank of the definite stream into the surrounding geological formation, the water is groundwater. (*See*, fn. 119 of this chapter for the Oklahoma statutory definition of "Groundwater.") If a landowner were using a well that increased the loss of water from the stream to the surrounding groundwater aquifer, it could be argued that the landowner is taking steam water, not groundwater. In effect, the landowner's pumping is increasing the magnitude of the loss of water from the losing stream and is, as if, the landowner has placed the pump directly into the stream bed itself.

It should also be remembered that a stream can be a "gaining" stream in one segment of its reach and be a "losing" stream in another segment of its reach. To write the obvious, the interrelationship between streams and aquifers is a very complex hydrology.

[123] These two legal arguments about reclassifying alluvial waters and losing stream waters would have a statewide impact. And assuredly, any reclassification would become Oklahoma water law only after litigation and a definitive Supreme Court of Oklahoma opinion. Reclassification presents significant and difficult legal issues about property rights in water in Oklahoma. *See especially*, Okla. Stat. Tit. 60 § 60 (Ownership of water – Use of Water) (2011). For purposes of this paragraph, the author has assumed a definitive Supreme Court opinion and then discusses the meaning for MPMCD.

wells within the Otter Creek and Elk Creek basins because most landowners in southwest Oklahoma did not begin to irrigate using high-capacity groundwater wells until after May 1955. Second, with senior rights, MPMCD could then use any interference regulations developed by OWRB to gain protection for its senior stream water rights against junior stream water-right holders, including those juniors (groundwater wells) taking alluvial waters or losing-stream waters -- that under present Oklahoma water law are considered groundwater, but now reclassified as stream water if the above two legal arguments were found to be valid by Oklahoma courts.[124]

In Chapter 2 on Background Law, OKLAHOMA LAW, Ground water defined, the author discussed these two reclassification arguments and, therefore, does not repeat these arguments and authorities here. For purposes of this chapter, what is most important is that, to the author's knowledge, neither of these two legal arguments have ever been presented to Oklahoma courts. Consequently, if MPMCD wanted to protect its surface water rights by reclassifying alluvial waters and losing stream waters as stream water, MPMCD likely has to pursue litigation to accomplish this reclassification. MPMCD would have to evaluate the wisdom of bringing such a lawsuit, the practical considerations related to bringing such a lawsuit, and the likelihood of prevailing in such a lawsuit. The author does not believe that his remit for this academic

[124] Of course, the author understands that the discussion in this paragraph presupposes that the aquifers in the Otter Creek and Elk Creek basins do, in fact, have a hydrological connection to the two streams. This may well be true for an alluvial aquifer but may well not be true for a bedrock aquifer. Again, to write the obvious, the interrelationship between streams and aquifers is a very complex hydrology. *See e.g.*, S. Smith, J. Ellis, D. Wagner, and S. Peterson, 2017. HYDROGEOLOGY AND SIMULATED GROUNDWATER FLOW AND AVAILABILITY IN THE NORTH FORM RED RIVER AQUIFER, SOUTHWEST OKLAHOMA, 1980-2013 (USGS Scientific Investigations Report 2017-5098). This USGS Scientific Investigation was prepared in cooperation with OWRB. [hereinafter cited as USGS Rep. 2017-0598]

research report includes discussing the wisdom, practical considerations, and likelihood of success of a reclassification lawsuit. The author believes his remit ends with bringing this reclassification issue to the attention of the study partners – OWRB, Reclamation and MPMCD.

b. Oklahoma Groundwater Law and MPMCD stream water rights

In its modeling of groundwater flows, U.S. Geological Service (USGS) concluded that Tom Steed Reservoir is primarily replenished by surface water runoff.[125] In other words, Tom Steed Reservoir is not heavily dependent on groundwater base-flows from Otter Creek and Elk Creek for its water supply. Table 2 in the USGS Report 2017-0598 identified that on average 25.7% of Elk Creek flows at Hobart (upstream of the Bretch Diversion Dam) are attributable to groundwater base flow. USGS did not address Tom Steed Reservoir's water supply dependency on groundwater base flows from Otter Creek and Elk Creek, as this was beyond the scope of their study. Regardless, the author cannot ignore the groundwater resources in the catchment basins of Otter and Elk Creeks and their potential impacts on Tom Steed Reservoir's water supply.

OWRB lists three groundwater aquifers for Otter and Elk Creeks catchment basins.[126] The Elk City aquifer is a major bedrock aquifer in the upper reaches of Elk Creek and has permitted groundwater rights of 9,400 acre-feet per year. The Southwestern Oklahoma aquifer is

[125] USGS Rep. 2017-0598 at p.3.

[126] OCWP Southwest at pp. 9-10. All data in this textual paragraph is from these two pages.
OWRB distinguishes major aquifers from minor aquifers as follows: "Bedrock aquifers with typical yields greater than 50 gpm (gallons per minute) and alluvial aquifers with typical yields greater than 150 gpm are considered major." Id. OWRB based this distinction on Okla. Stat. Tit. 82 § 1020.1 **Definitions**: "Major groundwater basin" and "Minor groundwater basin" (2011).

a minor bedrock aquifer underlying most of the land in the catchment basins of Otter and Elk Creeks and has permitted groundwater rights of 600 acre-feet per year. The North Fork of the Red River aquifer is a major alluvial aquifer of which a very small portion underlies Elk Creek above the Bretch Diversion to Tom Steed Reservoir.

OWRB in its database of groundwater permits states that there are 74 groundwater permits upstream of Tom Steed that total 13,877 acre-feet per year.[127] USGS simulates that these upstream groundwater permits have no measurable impact on the base-flow into Tom Steed Reservoir at 2013 pumping rates and even at predicted increased pumping rates in the year 2060.[128] Then in the USGS simulation, the model projects that if OWRB were to grant groundwater permits so as to allow "full" development[129] of groundwater use, then Tom Steed would suffer significant damage to its water supply in storage.[130]

In light of the data (actual and simulated) presented in the preceding two paragraphs, MPMCD may consider urging OWRB to limit groundwater pumping as much as OWRB has the legal authority to do so. As Oklahoma water law manages stream water rights and groundwater rights independently and separately, MPMCD would not be able to assert that its stream water

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[127] OWRB, Tom Steed Reservoir Summary Fact Sheet (no date) available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfbc74a4d8b919b2eceef8d43

[128] TS Status Quo Water Availability 2019 at p. 15, Table 3.

[129] Full development means that every acre overlying the aquifer uses its allocated EPS every year. Full development of the EPS in the aquifer could occur in at least two ways. Farmers could irrigate every acre overlying the aquifer. Overlying landowners could sell their groundwater EPS to other users (e.g. municipal or industrial users) who could either transport the aquifer water or withdraw the water at another location through a new well. *See e.g.*, Okla. Admin. Rule 785:30-7 **Changes in Groundwater Rights** (2014).

[130] TS Status Quo Water Availability 2019 at p. 15, Table 3; p. 18, Table 4; p. 22, Table 5.

rights have priority over groundwater rights. Thus, MPMCD would not have any legal basis for making an interference claim that groundwater permits are impairing MPMCD's stream water rights and the Tom Steed Reservoir water supply. Hence, MPMCD would have to look to influence OWRB within the present Groundwater Law in order for MPMCD to protect the groundwater base-flow for its water supply.

It is important for MPMCD to understand that groundwater under the Oklahoma Groundwater Law is the property of the overlying landowner.[131] While the State of Oklahoma has the sovereign power (and exercises that power) to regulate vested rights in groundwater, the State of Oklahoma cannot take away an overlying landowner's property right to groundwater without just compensation. A practical implication of groundwater being a private property right is that there is no "use it or lose it" attribute to groundwater and Oklahoma groundwater law – which is quite in contrast to stream water and Oklahoma prior appropriation stream water law.[132]

OWRB manages groundwater through four steps: 1) conduct hydrological surveys and investigations of groundwater aquifers to gather information;[133] 2) based on the surveys and investigations, set a tentative maximum annual yield (MAY) for each aquifer based upon a minimum life of twenty years for the aquifer;[134] 3) hold hearings to establish a final MAY for the aquifer which is then allocated to each acre of land overlying the aquifer thereby giving each

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[131] *See especially*, Okla. Stat. Tit. 60 § 60 (2011). *See also*, *Jacobs Ranch, LLC v. Smith*, 2006 OK 34, 148 P.3d 842.

[132] Okla. Stat. Tit. 82 § 105.2 (2011) for stream water: "Beneficial use shall be the basis, the measure and the limit of the right to the use of water …" Okla. Stat. Tit. 82 § 105.17 **Reversion of water to public** (2011).

[133] Okla. Stat. Tit. 82 § 1020.4 (2011).

[134] Okla. Stat. Tit. 82 § 1020.5 (2011).

overlying landowner an equal-proportionate share (EPS) in the waters of the aquifer;[135] and 4) accept and rule upon applications from overlying landowners who are seeking a permit for beneficial use of their allotted EPS.[136]

In setting a tentative determination of the MAY for an aquifer, OWRB must take into account "the rate of recharge to the basin or subbasin and total discharge from the basin or subbasin."[137] In addition, OWRB must determine a basin life that is a minimum of twenty years.[138] In light of these statutory obligations, OWRB arguably has the authority to consider (to some extent) groundwater and surface water interactions as OWRB sets a minimum basin life.[139] In addition, in light of the Water for 2060 Act,[140] OWRB has the authority to select a minimum basin life with an emphasis on conservation, meaning that OWRB legally could set a minimum basin life for the aquifers in the Otter Creek and Elk Creek catchment basins of fifty years (i.e. approx. 2070).[141]

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[135] Okla. Stat. Tit. 82 § 1020.6 (2011).

[136] Okla. Stat. Tit. 82 §§ 1020.7 through 1020.9 & 1020.15 (2011).
Okla. Admin. Code Tit. 75, Ch. 20 **Taking and Use of Groundwater** sets forth the administrative rules by which OWRB implements the cited statues from the Oklahoma Groundwater Law.

[137] Okla. Stat. Tit. 82 § 1020.5(A)(4) (2011).

[138] Okla. Stat. Tit. 82 § 1020.5(B) (2011).

[139] *See also*, Okla. Admin. Code § 785:46-17-3(b) (2014). In this antidegradation provision, OWRB indicates that MAY determinations take into consideration the interconnection between baseflow and groundwater withdrawals for purposes of protecting water quality.

[140] Okla. Stat. Tit. 82 § 1088.12 (2013 Supp.).

[141] The Water for 2060 Act sets the policy objective that Oklahoma will use no more fresh water by and after 2060 than Oklahoma used in 2010. Hence, the author chose a fifty-year aquifer life as the "minimum" life of the aquifer so as to meet this Water for 2060 Act policy objective.

If OWRB set, for example, a fifty-year basin life for aquifers in the Otter and Elk creeks catchment basins, while taking into account, groundwater and surface water interactions, OWRB could set an EPS for each overlying landowner that controls the authorized pumping in such a way as indirectly to protect the water supply of Tom Steed Reservoir. By setting a smaller EPS, each landowner can pump less groundwater per acre each year and by pumping less groundwater per acre each year, the base flows of Otter and Elk Creeks may gain protection.

OWRB had previously determined the EPS for two aquifers in the Otter Creek and Elk Creek catchment basins but those determinations are currently being updated. OWRB has set an EPS of 1.0 acre-foot per year for the North Fork Red River alluvial aquifer and 1.0 acre-foot per year for the Elk City bedrock aquifer.[142] As for the Southwestern Oklahoma aquifer, it carries a temporary default EPS of 2.0 acre-feet per year because hydrological surveys and investigations on this aquifer have not been completed.[143] However, the Legislature also gave OWRB the authority the review and update the hydrological surveys and investigations every twenty years.[144] When, OWRB reviews and updates information for an aquifer, OWRB can redetermine the MAY and the EPS for that aquifer. However, those overlying landowners who have already gained a permit for groundwater pumping have a vested right in the EPS applicable at the time

[142] OCWP Southwest at p. 9, Table of Groundwater Resources.

In the USGS 2017 investigation, the USGS modeled that a redetermined EPS for the North Fork Red River alluvial aquifer would be between 0.52 and 0.62 acre-feet per year, depending on the scenario adopted in the redetermination. USGS Rep. 2017-0598 at p. 70, Table 15.

[143] OCWP Southwest at p. 9, Table of Groundwater Resources. Okla. Stat. Tit. 82 § 1020.11(B)(2) (2011) (default EPS).

[144] Okla. Stat. Tit. 82 § 1020.4() (2011). OWRB undertakes these reviews and updates as OWRB considers necessary. Okla. Admin. Code § 785: 30-9-5 (2014).

OWRB granted their permits[145]. By contrast, those overlying landowners who apply for a new permit after the review and update, they can only pump to the level of the redetermined EPS, even if the redetermined EPS is smaller than the original EPS for that aquifer.[146]

In light of Oklahoma groundwater law, MPMCD could encourage OWRB, as OWRB reviews and updates the MAY and EPS for the North Fork Red River and the Elk City aquifers, to adopt a conservation-oriented, lesser EPS for future groundwater permit applicants. MPMCD could encourage OWRB to consider the total discharge from basins (surface and groundwater) such that discharge protections could be determined that maintain base flows above certain thresholds. MPMCD could also encourage OWRB to undertake the hydrological surveys and information needed to set an EPS for the Southwestern Oklahoma aquifer that would assuredly set a smaller EPS than the present default of 2.0 acre-feet per year. By these actions of encouragement, MPMCD could gain indirect protection for the base-flows of Otter and Elk Creeks. And by protecting base-flows, MPMCD assuredly protects the water supply in storage for Tom Steed Reservoir.

As OWRB determines a MAY and EPS, OWRB and MPMCD might consider the impact of a particular EPS on the likelihood that Tom Steed Reservoir would go dry before the projected life of the reservoir. If a particular EPS seriously threatened the viability of the Reservoir, the state law might be in conflict with federal Reclamation law. Reclamation projects must abide by

[145] Okla. Stat. Tit.82 § 1020.6(D) (2018 Supp.).

[146] Okla. Stat. Tit. 82 § 1020.6(D) (2018 Supp.) Section 1020.6(D) reads as follows: "The Board may, in subsequent basin or subbasin hearings, and after additional hydrologic surveys, increase the amount of water allocated but shall not decrease the amount of water allocated by regular permit issued prior to the completion of the additional hydrological surveys."

state water law for water rights. However, Reclamation projects are federal projects and state law cannot undermine the management of federal water projects.[147]

MPMCD also could engage in education efforts to assist landowners to manage their water resources so as to minimize the amount of water each landowner uses. Just as examples, possible educational and water conservation activities that might protect the baseflow of Elk and Otter Creeks include irrigation improvements (drip-irrigation), or crop and variety selection that requires less water while still producing a profitable harvest (drought-tolerant crops or varieties), or change from irrigated farming to dry-land farming or pasture ranching.[148] The goal would be to encourage holders of groundwater permits to keep their groundwater usage to the low percentage of authorized amounts that they have historically used. MPMCD would hope that the overlying landowners would not fully develop their groundwater permits at whatever MAY and EPS that OWRB has determined for the aquifers underlying their lands.

c. Dry-Year Option Leases to protect base-flow

Just as MPMCD might consider dry-year option leases for protection of its stream water rights,[149] MPMCD might consider dry-year option leases from landowners holding groundwater permits so as to protect base-flow for Otter and Elk Creeks. If landowners refrained from pumping their allocated EPS, the base-flows of the two creeks should increase. MPMCD could

[147] For discussion of the interplay between state water law for water rights and federal management of approved Reclamation projects, read Chapter 2 on Background Law in the headings FEDERAL LAW, Reclamation Law.

[148] The author acknowledges that other options exist beyond those mentioned in the text. For additional discussion of options available, read OCWP Southwest Watershed Planning Region (2012) at pp. 55-75 (Basins 34 & 35).

[149] See earlier discussion in Part III.c of this chapter.

pinpoint the preset condition for invoking the lease as the same trigger as used in the interference regulations between senior and junior stream water-right holders. Once a drought is underway, MPMCD may have the need to pay to protect base-flow for the Tom Steed Reservoir water supply.

As landowners own their groundwater and have a vested right in their allocated EPS, there should be no barriers in statutes or regulations to impede the negotiation of voluntary contracts between MPMCD and landowners.

But dry-year option leases of groundwater water-rights may be riskier than dry-year option leases of senior stream water- right holders. With regard to the catchment basins providing water to Tom Steed Reservoir, the number of landowners having permits in groundwater is likely to be greater, maybe substantially greater, than the number of senior stream water prior appropriators. Hence, the transaction and maintenance costs of these leases would be higher.[150] And most importantly, the hydrological impacts of groundwater pumping on base-flow are likely to be more complicated and more uncertain about actually producing "wet" water in the Tom Steed Reservoir. While the impact of groundwater pumping in the aggregate can be modeled,[151] the impact of any individual groundwater well upon base-flow is much more problematic.[152] MPMCD may not want to pay a landowner to refrain from pumping unless

[150] In 2019, the Oklahoma Legislature passed legislation allowing the creation of "Groundwater Irrigation Districts." Okla. Stat. Tit. 82 §§ 1021.1-1021.7 (eff. Nov. 1, 2019). If a Groundwater Irrigation District were to come into existence in the Tom Steed Reservoir catchment basins, MPMCD may have reduced transaction costs by dealing with the District rather than the individual groundwater permit holders.

[151] *E.g.*, USGS Rep. 2017-0598.

[152] The United States Geological Service (USGS) has presented such a project proposal to Reclamation for modeling that would undertake to identify the impact of specific, identified wells on base flow and the inflow in the catchment basins providing water to Fort Cobb Reservoir. USGS Simulated Effects April 2020. *See also*,

MPMCD can be assured that the reduction in pumping would protect and increase base-flows on Otter Creek or Elk Creek. Hence, dry-year option leases to landowners holding groundwater permits may be effectively an all (everybody) or nothing (nobody) proposition.

V. RED RIVER COMPACT

The Red River Compact[153] has one provision directly relevant to the Tom Steed Reservoir. This provision reads as follows:

> Section 4.02. Subbasin 2 – Intrastate and interstate streams – Oklahoma. (a) This subbasin is comprised of all tributaries of the Red River in Oklahoma and portions thereof upstream to the Texas-Oklahoma state boundary at longitude one hundred degrees west, beginning from Denison Dam [Lake Texhoma] and upstream … (b) The State of Oklahoma shall have free and unrestricted use of the water of this subbasin.

As Elk Creek and Otter Creek that flow into the Tom Steed Reservoir are intrastate streams, Oklahoma has the free and unrestricted use of their waters. Consequently, the Red River Compact poses no threat to the water supply of Tom Steed Reservoir or the water rights of MPMCD.

VI. TRIBAL JURISDICTION

In the case of *McGirt v. Oklahoma,*[154] the Supreme Court of the United States ruled that the Creek Nation Reservation of 1866 exists today and has not been diminished or

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Reclamation, *Draft Upper Red River Basin Study Report* (March 2020) at pp. 138-144, specifically Scenarios C & D (Measuring Streamflow Responses to Groundwater Pumping).

[153] Arkansas, Louisiana, Oklahoma and Texas agreed to a text of the Red River Compact on May 12, 1978. The Red River Compact became effective upon adoption by the Legislatures of the four states and the approval of the United States Congress. The Oklahoma Legislature approved the Red River Compact in 1979. Okla. Stat. Tit. 82 §§ 1431-1432 (2011) (eff. May 3, 1979).

[154] *McGirt v. Oklahoma*, ___ U.S. ___, 140 S.Ct. 2452 (2020). *See also, Sharp v. Murphy*, ___ U.S. ___, 140 S.Ct. 2412 (2020) (a companion case to *McGirt*).

disestablished. In light of this Supreme Court decision, the Creek Nation is a sovereign over the natural resources, including water, within its reservation boundaries.

The Creek Nation Reservation is in eastern Oklahoma. Tom Steed Reservation is in western Oklahoma and is not within the boundaries of the Creek Reservation of 1866. However, the implication presented by the *McGir*t decision is that tribal reservations might continue to exist in western Oklahoma. Thus, the question for this Chapter: Does a non-diminished and non-disestablished reservation exist that encompasses the catchment basin of the Tom Steed Reservoir?

Tom Steed Reservoir itself sits within the lands in the original Comanche, Kiowa, and Apache Reservation. Otter Creek, flowing into Tom Steed, is entirely within the Comanche, Kiowa, and Apache Reservation. Through the Bretch Diversion, Elk Creek also flows into Tom Steed. Elk Creek and its tributaries originate in the lands of the original Cheyenne and Arapaho Reservation before entering the Comanche, Kiowa and Apache Reservation.[155]

In the case of *Murphy v. Royal*,[156] the Tenth Circuit Court of Appeals set forth examples of congressional language that disestablished a tribal reservation. The Tenth Circuit quoted congressional language and cited a Tenth Circuit decision from 1950 as disestablishing the Comanche, Kiowa and Apache Reservation.[157] Thus, it appears to this author that the

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[155] C. Goins & D. Goble, HISTORICAL ATLAS OF OKLAHOMA (2006) at p. 13 (Major Lakes of Oklahoma), p. 129 (Map of the two Reservations), and p. 203 (Map of Southwestern Oklahoma). [hereafter Historical Atlas].

[156] 875 F.3d 896 (10th Cir. 2017). *Murphy v. Royal* became the companion case to *McGirt v. Oklahoma* at the Supreme Court under the name of *Sharp v. Murphy*.

[157] *Murphy v. Royal* at pp. 948-949.

Comanche, Kiowa and Apache Nations would not have jurisdiction over Tom Steed Reservoir and its contributing streams.

In *Ellis v. Page*,[158] the Tenth Circuit Court of Appeals faced a factual pattern identical to the *McGirt* factual pattern, except that the crime (murder) took place within the boundaries of the original Cheyenne and Arapaho Reservation. In affirming that the State of Oklahoma had criminal jurisdiction of the crime, the Tenth Circuit wrote:

> While the words of alienation employed in the treaties do not formally disestablish the reservations,[159] we think that they have the unequivocal effect of doing so. In treaty parlance, they are as appropriate to disestablish the reservations as the Congressional words "vacate and restore" employed in the 1892 Act to disestablish a portion of the Colville reservation.[160]

The Tenth Circuit ruled that the original Cheyenne and Arapaho Reservation no longer exists. Thus, it appears to this author that the Cheyenne and Arapaho Nations would not have jurisdiction over the tributaries, flowing from the northwest, into the catchment basin of Tom Steed Reservoir.[161]

The author expresses trepidation in concluding that these two Reservations no longer exist: these opinions are from the Tenth Circuit Court of Appeals, not the Supreme Court of the United States; these Tenth Circuit opinions predate Supreme Court jurisprudence that has been

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[158] 351 F.2d 250 (10th Cir. 1965).

[159] The Tenth Circuit was referring to the Cheyenne and Arapaho Reservation and the Comanche, Kiowa, Apache Reservation.

[160] *Ellis v. Page* at p 252.

[161] For a brief discussion of the history of the Cheyenne and Arapaho Reservation, read Historical Atlas at p. 128 ("Opening of the Cheyenne and Arapaho Reservation").

stricter in finding disestablishment;[162] and the Supreme Court could overrule these Tenth Circuit opinions in light of *McGirt v. Oklahoma*. Thus, the author thinks that future litigation could arise challenging the Tenth Circuit opinions finding that the Comanche, Kiowa, Apache Reservation and the Cheyenne and Arapaho Reservation were disestablished and no longer exist.

VII. AQUIFER RECHARGE

If MPMCD were to acquire a new stream water right in all the unappropriated waters of Otter Creek and Elk Creek,[163] MPMCD would control all water in storage in the Tom Steed Reservoir as a vested water right. By having a vested water right in all the water in the Reservoir, MPMCD could have the flexibility to engage in an aquifer recharge project at Hackberry Flat Wildlife Management Area.[164]

In the Permit 67-671, OWRB stated that MPMCD can divert water into the Reservoir "in order that it will not go on down to the North Fork of the Red River to be contaminated and lost." The Tom Steed Reservoir is in the arid southwestern part of the State of Oklahoma. But, on infrequent occasions, MPMCD may realize that the storage capacity of the Reservoir is full.

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[162] *See, e.g., Solem v. Bartlett*, 465 U.S. 463 (1984).

[163] Discussed in Part II.c of this Chapter.

[164] The author presents this topic of aquifer recharge at Hackberry Flat Management Area for consideration by the study partners. The author is aware that the implementation of this idea for aquifer recharge would create additional, complicated issues for the study partners – e.g. issues of costs for transport of this recharge water for both Reclamation, MPMCD and the Department of Wildlife Conservation (Department); issues of contract between MPMCD and the Department related to the circumstances under which the recharge water would be sent and accepted; issues related to clarifying the water permit rights of MPMCD so as to allow recharge water to be considered a permissible beneficial use under the MPMCD water right permit issued by OWRB.

The author points to Article 5 Surplus Environmental Quality Water of the contract between MPMCD and the Department. Article 5 seems to contemplate the use of water for a purpose such as aquifer recharge. Contract between MPMCD and State of Oklahoma (Oklahoma Department of Wildlife Conservation) for an Environmental Quality Water Supply (20 October 2016).

MPMCD might decide to send any flood control or overflow water (part of MPMCD's water right for recreation, fish, and wildlife) to Hackberry Flat wetlands, above and beyond the water specifically allocated to Hackberry Flat. Two purposes exist for sending this overflow water to Hackberry Flat: 1) to prevent the water from flowing down the North Fork to be contaminated by salt and lost to beneficial use in Oklahoma; and 2) to let the wetlands of Hackberry Flat perform as a source of natural recharge for the groundwater aquifer underlying Hackberry Flat.

Working in conjunction with the Oklahoma Department of Wildlife Conservation, Reclamation and MPMCD could develop a plan for Hackberry Flat that provides water for the wetlands and for the recharge of the aquifer underlying Hackberry Flat. Note that this plan for aquifer recharge would not directly benefit the water supply of Tom Steed Reservoir because the Hackberry Flat area is not connected hydrologically to Tom Steed Reservoir's water supply. But the recharge of an aquifer with overflow water should be a beneficial use for the State of Oklahoma and its users of water.

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CHAPTER FOUR: W.C. AUSTIN PROJECT-- LUGERT-ALTUS RESERVOIR

I. W.C. AUSTIN PROJECT – LUGERT-ALTUS IRRIGATION DISTRICT – HISTORICAL BACKGROUND INFORMATION

Shortly after Reclamation came into existence in 1902, Reclamation officials began to consider southwestern Oklahoma, specifically the North Fork of the Red River, as a possible site for a Reclamation irrigation project. Nothing came of the 1902 consideration nor of other similar considerations for the following three decades.[1] However, as the Depression of the 1930s and the Dust Bowl brought great hardship to the people of Oklahoma, the City of Altus, under the leadership of Judge W.C. Austin, renewed its efforts to convince federal agencies that the North Fork of the Red River would be a suitable location for a Reclamation Irrigation Project. These efforts birthed the Lugert-Altus Irrigation Project – today known as the W.C. Austin Project.[2]

On March 1, 1938, Congress received a Report from the Department of the Interior thoroughly discussing the feasibility of a Reclamation irrigation project on the North Fork of the Red River.[3] At the end of June 1938, Congress passed legislation authorizing various

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[1] Two excellent histories of the W. C. Austin Project (Lugert-Altus Project) are: Robert Autobee, W.C. AUSTIN PROJECT (Bureau of Reclamation, 1994) 20 pp. (hereafter Autobee); Christine Pfaff, THE W.C. AUSTIN IRRIGATION PROJECT HISTORIC INVENTORY REPORT (Bureau of Reclamation, 1993) 108 pp. (hereafter Pfaff Report). The Pfaff Report contains a detailed W.C. Austin Project Chronology pp. 94-105.

[2] The Lugert-Altus Irrigation Project was renamed the W.C. Austin Project shortly after the death of its primary proponent, Judge W.C. Austin. Public Law 69, 80th Cong., 61 Stat. 99 (May 16, 1947).

[3] Dept. of Interior, ALTUS PROJECT – OKLAHOMA: A Survey of the North Fork of the Red River with respect to Flood Control and Irrigation (75th Cong., 3rd Sess., Doc. No. 153, March 1, 1938).

Reclamation projects

> "for the benefit of navigation, and the control of destructive flood waters and other purposes ... The Lugert-Altus Flood Control and Reclamation Reservoir located on the North Fork of the Red River in Oklahoma ..."[4]

In 1938 and into the 1940s, Oklahoma statutes expressly allowed the appropriation of water by the United States. The precise statutory language was as follows:

> Whenever the proper officers of the United States, authorized by law to construct works for the utilization of waters within the State, shall notify [the Oklahoma Water Resources Board (OWRB)] that the United States intends to utilize certain specified waters, the waters so described, and unappropriated at the date of such notice, shall not be subject to further appropriation under the laws of this State, for a period of three years from the date of said notice, at which time the proper officers of the United States shall file plans for the proposed works in the office of [OWRB] for his information, and no adverse claim to the use of the waters required in connection with such plans, initiated subsequent to the date of such notice, shall be recognized under the laws of the State, except as to such amount of the water described in such notice as may be formally released in writing by an officer of the United States thereunto duly authorized: Provided, that in case of failure to file plans for the proposed work within three years, as herein required, the water specified in the notice given by the United States to the [OWRB] shall become public water, subject to general appropriation.[5]

In compliance with this Oklahoma statute, Reclamation gave notice to the State of Oklahoma that the United States intended to utilize the water of the North Fork of the Red River and its tributaries for the W. C. Austin Project.[6] In further compliance with this Oklahoma statute, Reclamation filed the W. C. Austin Project construction plans with the Oklahoma Planning and Resources Board (OPRB) [later renamed the Oklahoma Water Resources Board

[4] Flood Control Act of 1938 § 4, 52 Stat. 1219 (June 28, 1938).

[5] Okla. Stat. Ch. 70, **Art. 2 Irrigation** § 13081 (1931).

[6] Letter to the Oklahoma Planning and Resources Board from Oscar L. Chapman, Assistant Sec. of the Interior (July 13, 1939).

(OWRB)].[7] OPRB acknowledged receipt of the plans and described the plans "as being satisfactory and in full compliance with the statutes of the State."[8]

Planning and engineering for the W. C. Austin Project began in 1940; full construction began in 1941 before being interrupted by the diversion of labor and materials to World War II; construction resumed in 1946 with dedication ceremonies on September 3-5, 1947; by 1949, farmers irrigated 42,535 acres from the Project; tail-water drainage structures were the final construction phase, completed in 1953. Thus, counting the WWII interruption years, Reclamation finished the W. C. Austin Project in all its phases in thirteen years – from planning to tail-water drainage on farms.[9]

Lugert-Altus Reservoir is the reservoir for the W. C. Austin Project. Reclamation gives the reservoir capacity as total capacity of 162,300 acre-feet. The total capacity is further divided into three pools: 128,000 acre-feet for municipal/industrial and irrigation storage (the active conservation pool); 33,700 acre-feet for flood control storage and surcharge operations; and 600 acre-feet for dead-pool storage.[10]

Reclamation also assisted in legal aspects related to the W. C. Austin Project. The Lugert-Altus Irrigation District (LAID) came into legal existence in 1940 by farmers voting to

[7] Letter to the Oklahoma Planning and Resources Board from S.O. Harper, Chief Engineer, Bureau of Reclamation (May 3, 1942).

[8] Letter to S.O. Harper, Chief Engineer, Bureau of Reclamation from Don McBride, Director, Oklahoma Planning and Resources Board (May 8, 1942).

[9] Pfaff Report at pp. 61, 63, 94-105.

[10] Reclamation, Draft Upper Red River Basin Study Report (March 2020) at p. 16 Figure 1-7. (hereafter Draft URRBS March 2020).

form the district.[11] In 1942, LAID signed a contract with Reclamation accepting responsibility for repayment of the reimbursable portion of the project costs.[12] In 1952, Reclamation agreed that LAID would operate and manage the water distribution (the canals, the lateral ditches, the on-farm deliveries) aspect of the project.[13] In 1971, LAID and Reclamation agreed that LAID also would operate and manage the dam and the reservoir.[14] LAID completed repayment of the reimbursable project costs to the United States in 1990.[15] However, ownership of all facilities, including Altus Dam, remains with Reclamation.

Aside from the Reclamation irrigation project, Reclamation also recognized the municipal and industrial water needs of the City of Altus. In fact, the Altus Dam of the Lugert-Altus Reservoir is located at the site of the original municipal dam built by the City of Altus.[16] On May 2, 1941, Reclamation and the City of Altus contracted for the exchange of the City's 1925 water right to Reclamation in return for Reclamation's promise of a Project water supply to Altus.[17]

Turning specifically to water rights, OWRB determined vested water rights on the North

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[11] Pfaff Report at pp. 12, 94.

[12] Contract I1r-1375 (between United States and LAID) (January 12, 1942) Clause 7; Pfaff Report at 96.

[13] Pfaff Report at 67, 105. *But see*, *Davis v. Lugert-Altus Irrigation District*, 1962 OK 209, 375 P.2d 975.

[14] Amendment No. 1, Contract I1r-1375 (between United States and LAID) (January 13,1972); Pfaff Report at 67, 105.

[15] Amendment No. 3, Contract I1r-1375 (between United States and LAID) (September 25, 1990); Pfaff Report at 67.

[16] Pfaff Report at p. 14 and photos at pp. 17-18.

[17] Contract between the United States and the City of Altus for a Municipal Water Supply, Clauses 3 and 5 (May 2, 1941).

Fork of the Red River pursuant to the 1963 Oklahoma prior appropriation statutes.[18] OWRB recognized that the City of Altus has a water right for 4,800 acre-feet per year for municipal and industrial use with a priority date of December 29, 1925 (the date of the Altus application). OWRB recognized LAID has a water right for 85,630 acre-feet per year for the irrigation of 50,000 acres within LAID's irrigation district with a priority date of July 13, 1939 (the date of federal withdrawal of North Fork Red River water).[19]

As for how the City of Altus and LAID water rights function together, a 1954 legal settlement between them requires LAID to manage irrigation operations such that 10,000 acre-feet of water remains in storage at the end of the irrigation season. By so doing, LAID ensures that it can deliver, if needed and requested, 4,800 acre-feet of water to the City of Altus. In practical terms, LAID puts 5,200 acre-feet of "push" water into the canal as the quantity of water needed to deliver the 4,800 acre-feet that is the City's water right. Moreover, on top of the 10,000 acre-feet reserved for the City of Altus, LAID sets aside up to an additional 10,000 acre-feet of storage to meet minimum pool requirements and an estimated 5,000 to 9,000 acre-feet to account for evaporation losses in the Reservoir. Consequently, LAID reserves 29,000 acre-feet of water for the City and the Reservoir minimum pool. Therefore, if the Reservoir drops to or below approximately 29,000 acre-feet, LAID delivers zero water for irrigation to its farmers.[20]

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[18] Okla. Stat. Tit. 82 §§ 1 & 6 (Supp. 1963).

[19] OWRB set forth the City of Altus and the LAID water rights in OWRB Final Order No. 4 (July 14, 1964).

[20] Draft URRBS March 2020 at pp. 76 and 78-79. *See also*, Reclamation and OWRB, Upper Red River Basin Study: Impacts of Status Quo Management on Water Availability in the Lugert-Altus Reservoir Hydrologic Basin (Draft, April 2019) at p. 11 Reservoir Yield Modeling Scenarios. (hereafter L-A Status Quo Water Availability).

From the 1940s into the 1970s, LAID delivered an average of 2,637 acre-feet per year to the City of Altus for its water right. With the completion of the Tom Steed Reservoir in the 1970s, the City of Altus turned towards Tom Steed Reservoir as its source for the 4,800 acre-feet of its water right. Thus, for the 1980s until 2010, Tom Steed Reservoir was the primary source for the City of Altus' 4,800 acre-feet water right for municipal and industrial supply. However, during the 2010s Drought of Record, LAID delivered water to the City of Altus for the first time in almost twenty years. LAID delivered 824 acre-feet in 2011, 674 acre-feet in 2012, and 1002 acre-feet in 2013 – a total of 2,500 acre feet. During this time period, because the Luger-Altus Reservoir was below 29,000 acre-feet in storage, LAID made zero deliveries to its farmers for agricultural irrigation.[21]

In 1982, OWRB requested Reclamation to report water usage from its Oklahoma reservoirs because OWRB desired to "determine if other waters were available for appropriation" on the streams and rivers where the Reclamation Reservoirs were located. As part of this water availability determination, OWRB informed Reclamation that "OWRB is certain all waters upstream [of the Lugert-Altus Reservoir] are fully appropriated, and [OWRB] will allow no further surface water rights."[22]

Since the 1930s, the State of Oklahoma has operated Quartz Mountain State Park for fish and wildlife conservation and public recreation at the Lugert-Altus Reservoir and its surrounding

[21] Draft URRBS March 2020 at pp. 20 and 77.

[22] Memorandum to Reclamation Regional Director from C. Calhoun, Regional Supervisor of Water, Land, and Power (March 26, 1982). (The Memorandum reports on consultations between Reclamation and OWRB about the Lugert-Altus Reservoir.)

lands. The Oklahoma Department of Higher Education operates the southern portion of Lugert-Altus Reservoir, with the Quartz Mountain State Lodge, for public recreational purposes. The Oklahoma Department of Wildlife Conservation operates the norther portion of Lugert-Altus Reservoir, including wetlands, for wildlife purposes. Reclamation and LAID work in coordination with the State of Oklahoma to provide benefits to fish and wildlife and recreation, which are authorized as "other purposes" in the 1938 legislation.[23]

One final paragraph of historical background (and ultimately of legal significance) relates to water conservation. The W.C. Austin Project infrastructure includes four canals (Main, Altus, West, and Ozark) measuring 52 miles that provide water to 221 miles of lateral distribution systems (on-farm conveyances/ditches), and 26 miles of drains.[24] In an irrigation district this expansive (serving approximately 50,000 acres of farmland), seepage and tail-water can give rise to concerns about wasting water. LAID has regularly engaged in conservation efforts to control seepage and reduce tail-water both with respect to the distribution system itself and with respect to on-farm practices related to irrigation technologies and agronomic practices.[25]

II. DEFINING THE STREAM WATER RIGHTS OF LUGERT-ALTUS IRRIGATION DISTRICT

As the author of this Chapter has thought about the water rights of LAID, the author came to envision three distinct scenarios for LAID water rights that deserve discussion. The first

[23] Draft URRBS March 2020 at pp. 18, 21-23; Pfaff Report at pp. 66-67; Bureau of Reclamation, LUGERT-ALTUS CONSERVATION STUDY APPRAISAL REPORT (October 1995) at pp. 3 & 7. (hereafter Conservation Study.)

[24] Draft URRBS March 2020 at p. 18-19.

[25] Conservation Study at p. 1; Reclamation List of Conservation Projects 2005-2019 (January 2020) 3 pp.; Saleh Taghvaeian, Agricultural Water Conservation at Lugert-Altus Irrigation District (August 2019) 2 pp.; Reclamation, Managing Water (Update Sept. 2009) at pp. 29-31; USDA Soil Conservation Service, Watershed Plan and Environmental Assessment for Lugert-Altus Watershed (December 1989) 59 pp. *passim*.

scenario attempts to understand and to clarify the OWRB Final Order No. 4 of July 1964 giving LAID its core water right. The second scenario makes a maximalist water-right claim in which LAID asserts a water right to a full reservoir -- i.e. to the top of the conservation pool of Lugert-Altus Reservoir. The third scenario discusses the possibility of LAID seeking new, additional water rights from OWRB so as to better protect its already granted water right and to better protect tis water supply looking toward future water demands on the North Fork of the Red River (NFRR) and its catchment basin.

a. OWRB Final Order No. 4 (July 14, 1964)

There is no dispute about the water rights of LAID. There are two water rights clearly defined in the OWRB Final Order No. 4 establishing and listing vested surface water rights in the North Forth of the Red River (NFRR) Stream System (July 14, 1964). Those two rights read as follows:

> 3. City of Altus, Oklahoma. PRIORITY: Based on Application No. 26-6 filed December 29, 1925. PURPOSE: Domestic, municipal and industrial use of the City of Altus through its municipal water supply system. AMOUNT: 4,800 acre-feet of water annually diverted from the North Fork of the Red River ...
>
> 6. Lugert-Altus Irrigation District Altus, Oklahoma. PRIORITY: Based on the withdrawal of the United States through the Secretary of the Interior of all unappropriated waters of the North Fork of Red River above the Lugert Reservoir Dam on July 13, 1939. PURPOSE: To irrigate 50,000 acres of land in Jackson County through the District's distribution system of canals. AMOUNT: 85,630 acre-feet of water annually diverted from the North Fork of the Red River ..."

The City of Altus contracted with Reclamation to exchange its 1925 water right for Reclamation's promise of a water supply from Lugert-Altus Reservoir.[26] The practical impact of

[26] Contract between the United States and the City of Altus for a Municipal Water Supply, Clauses 3 and 5 (May 2, 1941).

this contact is that LAID manages both the City's water right[27] and its own water right -- totaling 90,430 acre-feet per year. Several legal consequences follow from this Final Order No. 4.

First, although the City is listed # 3 and LAID is listed # 6 on OWRB Final Order No. 4, LAID, as a practical matter, is the senior stream water rights holder within the Oklahoma prior appropriation system on the NFRR. Two farmers have positions # 1 and # 2 on the Final Order No. 4 list but they are located 64 miles upstream of the Lugert-Altus Reservoir on the East Buffalo Creek tributary of the Sweetwater Creek tributary of the NFRR. These two farmers have water rights for 484 acre-feet annually. By being upstream, these farmers will always get their water and have minimal or, more likely, no impact on water flowing into the Lugert-Altus Reservoir. LAID will never face a priority call from these two senior rights.[28] Two towns have positions # 4 & # 5 but these two towns divert waters from Little Elk Creek and Otter Creek, tributaries to the NFRR that join the NFRR downstream from the Lugert-Altus Reservoir. By being on downstream tributaries, and not on the main stem, LAID will never be required to provide water to fulfill these senior rights.[29] LAID is effectively the senior stream water rights holder on the NFRR. Every other person (entity) listed on Final Order No. 4 is a downstream, junior water rights holder. LAID will always get its water right before these downstream juniors.

Second, LAID has a water right for irrigation of 85,630 acre-feet per year to provide

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[27] Read the text accompanying footnotes 19-21 above in this chapter for how LAID manages the City of Altus' water right.

[28] The author located these two farmers using Google® maps and upon the assumption that these two farmers are still using their water rights. The assumption may be incorrect.

[29] The author assumes that these two towns still use these #4 & #5 water rights for municipal water supply. This assumption may be incorrect.

irrigation water to 50,000 acres of farmland within its district. A recent study indicates that when actual deliveries to project farmers accounts for hydrological conditions (i.e. the annual amount of rainfall), depending upon the time periods considered, LAID has averaged delivery of 54,500 acre-feet per year to its farmers.[30] LAID has been able to deliver its full water right (85,630 acre-feet/year) to farmers for irrigated lands within LAID only in three years (1963, 1998, 2000).[31] In other words, LAID uses every acre-foot of water available in the reservoir and would use more, on average, if the water were more often available for delivery to its farmers. Consequently, LAID has a water right in an amount substantially larger than the average amount available in the reservoir. LAID could annually claim additional amounts of water for the reservoir of 31,130 acre-feet on average, if hydrological conditions were favorable. This discrepancy between the water right and the amount actually delivered helps to explain why OWRB considers the NFRR above the Lugert-Altus Reservoir to be a fully appropriated stream system.[32]

Third, the City of Altus has minimally used water from the Altus Reservoir since the completion of the Tom Steed Reservoir in 1979. During the Drought of Record, the City of Altus used Lugert-Altus Reservoir as a water supply, taking about 2,500 acre-feet from 2011 thru 2013. But that means that the City of Altus used water from the Lugert-Altus Reservoir in only three years of a 40-year period (1979-2019). Thus, theoretically, the City's failure to use its full

[30] Draft URRBS March 2020 at p. 82.

[31] Draft URRBS March 2020 at p. 81.

[32] Draft URRBS March 2020 at p. 156.

water right could result in 4,800 acre-feet being returned to the NFRR for use by other appropriators.[33] With regard to the actual pattern of water rights on the NFRR, LAID is the next senior appropriator on the NFRR that would claim the water returned to the river. LAID would use the 4,800 acre-feet per year to get closer to its full water right of 85,630 acre-feet per year.

Fourth, as set forth in the background history[34] of the W. C. Austin Project, LAID has consistently pursued conservation measures to reduce seepage and drainage loses of water. LAID has done so for conservation reasons – getting more water for its farmers for their irrigated lands. But LAID's consistent efforts in conservation also has a legal consequence. By these consistent conservation efforts, LAID should be protected from anyone (including OWRB) claiming that LAID is wasting water and, if LAID were wasting water, being at risk of a reduction in its water right.[35] Thus, LAID should be secure in its two water rights as set forth in OWRB Final Order No. 4.

b. Top of the Conservation Pool

Lugert-Altus Reservoir has a conservation pool capacity of 128,000 acre-feet.[36] If LAID could claim a water right to the top of the conservation pool, LAID would expand its water rights by 37,570 acre-feet – i.e., from 90,430 acre-feet (LAID irrigation water right of 85,630 plus the City of Altus water right of 4,800 acre-feet) to 128,000 acre-feet. What are the legal issues

[33] Okla. Stat. Tit. 82 § 105.17 (2011) (**Reversion of water to public**).

[34] Read fns. 24 & 25 and accompanying text above in this Chapter.

[35] Okla. Stat. Tit. 82 § 105.2(A) (2011) ("Beneficial use shall be the basis, the measure, and **the limit** of the right to use water.") (Bold emphasis from author) Waste of water is not a beneficial use in prior appropriation water law.

[36] Draft URRBS March 2020 at p. 16, Figure 1-7.

involved if LAID were to assert a water right to 128,000 acre-feet?

When Reclamation filed notice of withdrawal of the water of the NFRR for the W.C. Austin Project, Reclamation withdrew the following specified water:

"Water of the North Fork of the Red River and the tributaries of said North Fork to be utilized by direct diversion or storage at the Lugert-Altus Dam, proposed to be constructed by the United States near Lugert, Oklahoma … in the following manner … (c) By both direct diversion and storage, as described above."[37]

The letter clearly withdraws all the water of the NFRR above the proposed dam site.[38] However, the withdrawal letter describes the water for the project as water "to be utilized by direct diversion or storage …" And then the letter reiterates that Reclamation is withdrawing the water for "both direct diversion and storage …"

Thus, if LAID sought to claim a water right to the full conservation pool (128,000 acre-feet), a significant legal issue would be the distinction in Oklahoma water law between a reservoir owner's water right and a reservoir owner's storage right. In the Oklahoma statutes of 1941,[39] Okla. Stat. Tit. 82 § 21 sets forth the procedure for applying for a water right. Section 21 ends with the following language:

"The owners of works proposing to store or carry water in excess of their needs for beneficial use, may make application for such excess, and shall be held as trustee of such right for the parties applying the water to a beneficial use; and shall be required to furnish the water

[37] Letter to the Oklahoma Planning and Resources Board from Oscar L. Chapman, Assistant Sec. of Interior (July 13, 1939).

[38] *See*, Letter to James R. Barnett, Exec. Dir. OWRB from Kenneth R Pedds, U.S. Dept. of Interior (March 20, 1987).

[39] The author uses the Oklahoma Statutes of 1941 because these statutes governed the W.C. Austin Project from the time of the withdrawal letter through the completion of the project in 1949/1950. The Oklahoma Legislature made only minor changes in Oklahoma's water law statutes during the two decades from 1931 through 1951. None of these minor changes have any significance for the legal analysis presented in this chapter.

for such parties at reasonable rates for storage or carriage or both, as the case may be."[40]

In light of the language of the letter of withdrawal and the Oklahoma statutes, OWRB and LAID would need to resolve two interrelated legal questions: How much water captured by Lugert-Altus Reservoir is for direct diversion – LAID's water right for beneficial use for irrigation? How much water captured by Lugert-Altus Reservoir is for storage -- LAID's storage right held as a trustee for future applicants for the beneficial use of the stored water?

As explained in Chapter 2, Reclamation's withdrawal of water does not create a water right.[41] Rather, the notice of withdrawal protects the withdrawn water from other claimants until, within three years, Reclamation files plans for the proposed project.[42] Once Reclamation files plans, then an entity – in this instance LAID – can file an application for a water right that quantifies and claims the water the filed plans require.

As can be expected, the Reclamation 1938 plan[43] did not give a precise amount of water as required for LAID because Reclamation prepares these plans prior to the actual construction of the project. Rather, the Reclamation plan states: "For the period of record, 1907-1936, it is found that water is available to provide a full irrigation supply for the area varying from 20,000 to 70,000 acres with an average of 47,000 acres." Moreover, the Reclamation 1938 plan

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[40] Okla. Stat. Tit. 82 § 21 (1941) (originating in Oklahoma Revised Laws of 1910, § 3643.) *See also*, Okla. Stat. § 101 **Surplus Water** (1941) (originating in Oklahoma Revised Laws of 1910, § 3659.)

[41] Chapter 2 in the headings OKLAHOMA LAW, United States withdrawal of Oklahoma stream water at pp. 35-39.

[42] Okla. Stat. Tit. 82 § 91 **Appropriation of water by United States** (1941) (originating in Oklahoma Revised Laws of 1910, § 3660.)

[43] Dept. of Interior, *Altus Project-Oklahoma: A Survey of the North Fork of the Red River with respect to Flood Control and Irrigation* (75th Cong., 3rd Sess., Doc. No 153, March 1, 1938).

estimated that irrigated farming for the W.C. Austin project would need about 39 inches per year with 16.69 inches on average coming from annual rainfall from April through September and the remaining 22.31 coming from water LAID would distribute.[44]

The Reclamation 1938 plan appears to have been quite prescient. As reported by Reclamation in 2020, LAID irrigates 48,000 acres with an average delivery of 54,500 acre-feet per year.[45] The LAID geographical area for irrigated cotton, the primary crop for farmers within LAID, needs approximately 30 inches of water per acre with 15.72 coming from annual rainfall from April to September and 13.62 inches coming from LAID.[46] Thus, in an average year, farmers within LAID receive 29.34 inches of water (rainfall plus reservoir deliveries) for their irrigated cropland.

When OWRB determined the vested water rights on the NFRR in 1964, OWRB concluded that LAID had a water right of 85,630 acre-feet per year to irrigate 50,000 acres of cropland.[47] Dividing the irrigated acres into the allotted acre-feet means that each LAID farmer would receive, if the water were physically available in the Reservoir, 20.55 inches of delivered water. To this author's mind, the OWRB 1964 vested water right is consistent with the

[44] Id. at p. 8 (data on average rainfall) and p. 33 (data on water demands for irrigated cropland in southwest Oklahoma.) Taking the 1938 plan data (47,000 irrigated acres in an average year receiving 22.31inches from LAID), the direct diversion for irrigation would be 87,380.8 acre-feet per year.

[45] Draft URRBS March 2020 at p. 4 (irrigated acres) and p. 82 (graph of average deliveries). By the end of the build-out of the canal and delivery system in 1950, LAID had the delivery infrastructure for approximately 47,000 acres. Pfaff Report at p. 78.

[46] Draft URRBS March 2020 at pp. 213-215.

[47] OWRB, Final Order No. 4 Establishing Vested Surface Water Rights in the North Fork Red River Stream System (July 14, 1964).

Reclamation 1938 plan and with the actual reported usage of water by LAID for its farmers since operations fully began in 1949/1950.[48]

Why does this factual information about acres irrigated, inches delivered, and irrigated cotton water-demand matter? Both Oklahoma water law[49] and Reclamation law[50] provide that beneficial use is the basis, the measure, and the limit of a water right in the prior appropriation system. LAID can claim a water right only for the amount it needs (the basis) for the number of irrigated acres within the district. LAID can quantify that needed amount by the anticipated crop water-demand (the measure). LAID cannot claim a water right in an amount above the basis and the measure (the limit) because Oklahoma reserves that additional water for other potential prior appropriators. In other words, if LAID made a claim for 128,000 acre-feet to the top of the conservation pool, OWRB and LAID would likely be in disagreement about a fundamental principle of prior appropriation – the concept of beneficial use.

If OWRB and LAID disputed the concept of beneficial use, as applied to the Lugert-Altus Reservoir conservation capacity of 128,000 acre-feet, the language of the Oklahoma federal withdrawal statute would also be legally significant. In 1941, the Oklahoma statute read

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[48] The Reclamation 1938 plan estimated 39 inches of water for irrigated cropland in southwestern Oklahoma. URRBS indicates 30 inches of water for irrigated cotton cropland in southwestern Oklahoma. The OWRB vested water right would give LAID farmers 36.27 inches of water (15.72 rainfall and 20.55 reservoir deliveries) for irrigated cropland.

[49] Okla. Stat. Tit. 82 § 1 **Use of water and priority of right** (1941) (originating in Oklahoma Revised Laws of 1910, § 3636). Section 1 begins with these words: "Beneficial use shall be the basis, the measure, and the limit of the right to the use of water, and all water appropriated for irrigation purposes shall be appurtenant to specified lands owned by the person claiming the right to use the water, so long as the water can be beneficially used thereon. …"

[50] 43 U.S.C. § 372 (2018) (originating in the Reclamation Act of June 17, 1902). Section 372 ends with the following language: "… *Provided* that the right to the use of water acquired under the provisions of this act shall be appurtenant to the land irrigated and beneficial use shall be the basis, the measure, and the limit of the right."

in part: "… the United States shall file plans for the proposed works …, and no adverse claim to the use of the waters required in connection with such plans, initiated subsequent to the date of such notice, shall be recognized under the laws of the State …"[51] The Reclamation 1938 plan primarily focused on an irrigation project for the W.C. Austin Project; the plan also discussed flood control and water for the City of Altus. In other words, the Reclamation 1938 plan indicates that "the waters required in connection with such plans" are primarily waters for the beneficial purpose of irrigation from the Lugert-Altus Reservoir.

In summary, the author thinks that the facts surrounding the W.C. Austin project point to the same conclusion for each of the three highlighted legal issues (water right versus storage right, the concept of beneficial use, and the language of the Oklahoma federal withdrawal statute): LAID has a water right for irrigation of 50,000 acres in the amount of 85,630 acre-feet per year plus the City of Altus water right (4,800 acre-feet). LAID has a storage right, as trustee, for other excess (or surplus) water in the Reservoir above 90,430 acre-feet.

OWRB can grant a permit to applicants for an amount within the quantity of surplus water stored in the reservoir.[52] For these permits from surplus water, OWRB is required to put a condition on the permit that the applicant enter into a repayment contract with the District (i.e. LAID) within two years of the issuance of the permit.[53] In the author's opinion, OWRB also

[51] Okla. Stat. Tit. 82 § 91 (1941). The author considers the underlined words as the most relevant to the specific discussion in the text.

[52] *See*. Okla. Admin. Code § 785:20-5-5(b)(1) (2014).

[53] Okla. Admin. Code § 785:20-7-5 (2014). *See also*, 82 Okla. Stat. Tit. 82 § 105.21 **Surplus Water** (2011) that states, "… shall be required to deliver such surplus, at reasonable rates for storage or carriage, or both, as the case may be, to the parties entitled to the use of the water for beneficial purposes. …"

may consider putting a condition into a surplus water permit that clearly specifies how and when the surplus water permit ends so as to protect LAID's senior water rights of 90,430 acre-feet per year. Even if OWRB does not add the author's suggested condition, LAID assuredly will add a clause to the mandatory contract between LAID and the surplus water user indicating when LAID is entitled to end surplus water delivery – in order to protect its irrigation and municipal/industrial water rights and to protect is contractual obligations to farmers and the City of Altus.[54]

One other argument for the "top of the conservation pool" needs discussion.

Reclamation has estimated that Lugert-Altus Reservoir needs about 115,000 acre-feet of water in storage to assure that LAID can deliver its full irrigation water right (85,630 a.f.), can deliver the City of Altus' water right (4,800 a.f.), and maintain the City's reserve (20,000 a.f.) under the 1954 legal settlement.[55] By this estimate of 115,000 acre-feet, Reclamation is taking into account evaporation loss from the Lugert-Altus Reservoir.

OWRB no longer allows Reservoir claimants to include evaporation in their stream water appropriation.[56] But the fact that OWRB has adopted this legal approach to evaporation does not

[54] In the management of the 4,800 acre-feet of municipal water for the City of Altus, LAID ceases the delivery of water to its irrigation farmers when the amount of water in the Reservoir falls below 29,000 acre-feet. Read fns.19-21 and accompanying text above in this Chapter.

[55] Draft URRBS March 2020 at pp. 83-84.

[56] Letter of James Barnett, Exec. Dir. OWRB to Robert Weimer, Reg. Dir. Reclamation (July 16, 1981) wherein Mr. Barnett writes: "… I believe our only point of difference was one of procedure on how to administratively acknowledge, treat and record the matter of evaporation loss from the reservoir. Our mutual acknowledgement that even though the evaporation loss from the reservoir must be duly accounted for, it should not be considered as part [of the water permit amount] for actual use and appropriation …" This Barnett letter to Weimer was specifically in reference to Fort Cobb Reservoir but clearly applies to all four of the Reclamation reservoirs that are the subject of this report.

mean that OWRB can ignore evaporation in the issuance and enforcement of stream water rights. To this author's mind, there are two ways to handle evaporation loss.

First, OWRB could revert to its position of the late 1960s that evaporation can be included in the water right as a form of actual use.[57] At that time, OWRB may have considered evaporation as includable within the water right because a reservoir is a diversion point of the water. A water-right holder has a water right to the amount actually used and to the amount of water for a reasonably efficient carriage of that water from the diversion point to the water-right holder's fields, municipal water plant, or industrial plant. If the reservoir, by storing the water, is reasonably efficient in carrying the water until the reservoir releases the water for ultimate beneficial users of the water, then the reservoir could claim evaporation as part of the water right for actual use.[58] If OWRB reverted to this earlier policy of allowing evaporation loss as part of the actual use of the appropriation, OWRB and LAID might agree to a water right that is closer to the top of the conservation pool – e.g. either 128,000 acre-feet (conservation pool capacity) or the 115,000 acre-feet (the Reclamation estimate).

Second, OWRB can account for evaporation as it determines whether unappropriated water exists for future applicants for water rights and as it acts to protect water rights from interference by junior water-right holders. The author will more fully discuss this "interference" approach to accounting for evaporation in Part III(a) of this chapter.

c. Additional stream water right for Lugert-Altus Irrigation District

[57] Memorandum from Area Engineer (Flagg) to Reclamation Office Files (Jan. 22, 1969).

[58] D. Getches, WATER LAW IN A NUTSHELL (4th ed. 2009) at pp. 129-137.

As has just been discussed, the author is doubtful that LAID presently has a claim to a water right for the additional 37,570 acre-feet of water that Lugert-Altus Reservoir has the capacity to hold above and beyond the LAID irrigation water right and the City of Altus municipal water right (total of 90,430 acre-feet). Should LAID consider making an application for a new water right in this 37,570 acre-feet of water?

Due to hydrological conditions, LAID is presently getting less actual "wet" water in acre-feet in an average year into the reservoir than its "paper" water right allows. Thus, one might ask, what additional water right might LAID claim? And, why would LAID undertake to make the additional water right claim?

While LAID's irrigation water right gives it a claim to 85,630 acre-feet per year, in the year 2000 LAID made deliveries of 106,542 acre-feet to its farmers (obviously a very wet 2000).[59] Moreover, Lugert-Altus Reservoir has capacity to hold 128,000 acre-feet in its conservation pool. Depending on heavy rainfall and runoff, the Reservoir, at times, has been full with water into its flood control pool. Therefore, in very wet years, additional water (the 37,570 acre-feet of water to the conservation pool capacity of the Reservoir) does exist for which an applicant might make a claim to a water right. LAID has the statutory right to apply for a water right.[60]

In the opinion of this author, LAID can best claim this additional 37,570 acre-feet of conservation pool water by filing an application for all unappropriated water on the NFRR. In

[59] Draft URRBS March 2020 at p. 81.

[60] Okla. Stat. Tit. 82 §§ 105.9 to 105.11 (2011).

other words, the all unappropriated water is the runoff and rainfall in the NFRR basin in very wet, infrequent years that fills Lugert-Altus Reservoir to its conservation pool capacity or, at least, fills Lugert-Altus Reservoir above the total amount (90,430 af) of LAID's present two senior water rights.[61]

LAID may well want to claim this additional water for several reasons.

First, by claiming this additional water in a new water right, LAID protects itself from having to allow this additional water to be withdrawn, through a surplus water permit, by another water-right holder. LAID likely prefers to keep and use the additional water as LAID desires rather than having to honor someone else's water right. By claiming a water right to this additional 37,570 acre-feet, LAID changes its legal status from a trustee of surplus, stored water into an owner of a water right.

Second, by claiming this additional water in a new water right, LAID turns the OWRB policy of not granting any new prior appropriations on the NFRR upstream of Lugert-Altus Reservoir[62] into a legal impossibility because LAID would have a vested water right in all

[61] By equating "all unappropriated water" with the runoff and rainfall of very wet, infrequent years, LAID should not be contradicting the OWRB calculation of 2012 that concludes that there is no unappropriated water on the NFRR. OCWP, Southwest Watershed Planning Region Report at p. 11 (ver. 1.1, 2012). OWRB and the OCWP Report use **average annual** run-off to calculate whether unappropriated water exists or does not exist on a particular stream segment. Memorandum to OWRB File from Elise Sherrod, *Standard Determination of Available Stream Water* (Oct. 2, 2018). LAID would be making a claim to rainfall and runoff in a very wet, infrequent year – i.e. not an average annual runoff year of the standard calculation.

The author acknowledges that the statutory language about granting a water permit may not allow a water permit for "future availability" of water. Under present practice and formulas, OWRB grants permits for "unappropriated water" presently existing in the stream. Thus, it may be that the District would apply for a new additional water right in the "all unappropriated water" not upstream but in the Reservoir itself when the Reservoir is full – to the top of the conservation pool.

[62] Draft URRBS March 2020 at p. 156.

additional waters from all years. If LAID gained a new water right to all additional water, then legally there would be no unappropriated water available for other applicants.[63]

Third, LAID could work in conjunction with the Oklahoma Department of Higher Education and the Oklahoma Department of Wildlife Conservation to dedicate this additional water to fish and wildlife and recreation. In other words, LAID could gain a water right explicitly for a non-consumptive purpose that furthers conservation and environmental goals of the State of Oklahoma.[64]

Oklahoma prior appropriation law now clearly recognizes recreation, fish and wildlife as permissible beneficial uses of water. Beginning in 1973, OWRB promulgated a definition of "beneficial use" that ends with the following sentence: "Beneficial uses include but are not limited to municipal, industrial, agricultural, irrigation, recreation, fish and wildlife, etc."[65] LAID thus can apply for a non-consumptive use of the additional water in very wet years on the NFRR with a priority date as of the date of the application. This new water right would be junior to other NFRR water rights but, as will be explained shortly in this Chapter,[66] being a junior

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[63] Okla. Stat. Tit. 82 § 105.12(A) (2011). (OWRB cannot grant a regular stream water permit unless it determines that unappropriated water is available.)

[64] It is true that LAID could apply for this additional water right for the purpose of irrigation. However, it appears that LAID has an adequate water right for irrigation for farmers within the District, when the water is available in very wet years. Moreover, this additional water right would be in water that infrequently occurs – only in very wet years – and, as a consequence, farmers could not realistically rely upon this additional water in planning for planting crops and managing their farmlands.

[65] OWRB Rule 300.1(o), 600.1(g) (1973). *See also*, Okla. Stat. Tit. 82 § 1084.1 (2011) (eff. July 1, 1993). For a thorough discussion of the concept of "beneficial use" in Oklahoma water law, D. Couch & L. Klaver, *Beneficial Use in Oklahoma Water Law: Opportunity for Better Management or More Mischief?*, 64 Okla. L. Rev. 615 (2012), especially pp. 628-634 (Beneficial Use Defined by Rule) and pp. 644-652 (Beneficial Use, Nonconsumptive Use and Instream Flow Use).

[66] Read III.a of this Chapter.

water right would not be a significant diminishment of this new water right.

Fourth, if LAID gained this new, non-consumptive water right, LAID would also indirectly protect its consumptive (irrigation and municipal) water rights. By having a new, non-consumptive water right that is junior to its senior consumptive water rights, LAID is protecting its senior water rights from junior interference and, effectively, accounts for evaporation loss.

With the help of Reclamation, LAID has a second path to claiming a new additional water right. Reclamation can file a notice of withdrawal[67] for all unappropriated water on the NFRR above the Lugert-Altus Reservoir. Reclamation would then have three years within which to file plans for the use(s) of this additional water and eight years to complete the project from the date of filing the plans with OWRB.[68] Once the plans were in place, LAID could make the formal application for a new additional water right in its own name. If Reclamation filed a notice of withdrawal, the new LAID water right would carry a priority date of the date of the notice of withdrawal. LAID and Reclamation would need to discuss which path for claiming a new additional water right is the preferable path, if any path is worth taking.[69]

If LAID applied for a new additional water right in all unappropriated water of the North Fork basin above Lugert-Altus Reservoir, this new water right would be the most junior water right on the stream. But LAID should not be worried about this junior priority because the water

[67] Okla. Stat. Tit. 82 § 105.29 (2011). Reclamation would have to comply with significant procedural obligations as set forth in 82 § 105.29 (2011).

[68] Reclamation can file a notice of withdrawal in accordance with the purposes of the W.C. Austin Project as set forth in the 1938 authorizing legislation. Flood Control Act of 1938 § 4, 52 Stat. 1219 (June 28, 1938).

[69] The author adds that LAID seeking an additional new water right for all unappropriated water in the North Fork River basin above Lugert-Altus Reservoir appears legally simpler and less complex than LAID making a claim for 37,570 acre-feet by arguing that it already has a water right to the top of the conservation pool.

right would come into existence only in very wet years – years so wet that senior water-right holders on the North Fork also would easily get their permitted water without any substantial impact on LAID's new water right.

III. PROTECTING THE STREAM WATER RIGHTS OF LUGERT-ALTUS IRRIGATION DISTRICT

The prior appropriation system of water law has a foundational principle: "first in time is first in right." OWRB has adopted this foundational principle in its regulations: "... Among regular permit holders, priority in time, determined by date of filing an application as provided in these rules, shall give the better right."[70]

LAID has a clearly recognized priority date of July 13, 1939.[71] As previously explained, LAID effectively has the two senior water rights on the NFRR.[72] As for junior stream water rights upstream of Lugert-Altus Reservoir, Reclamation identified nine regular stream water permits totaling 931 acre-feet per year with a modeled consumptive use of 678 acre-feet per year.[73] As for provisional temporary stream water permits,[74] Reclamation counted provisional temporary stream permits averaging 311 acre-feet per year from 1992 to 2014, but with 6,491

[70] Okla. Admin. Code § 785: 20-7-1(g) (2014).

[71] OWRB, Final Order No. 4 (14 July 1964), No. 6 on the list establishing vested surface water rights in the North Fork Red River Stream System.

[72] Read Part II.a of this Chapter explaining LAID's water rights as the senior water rights on the NFRR.

[73] L-A Status Quo Water Availability Table 1 at p. 9. Three of the nine have the same diversion point and, consequently, can be modeled together as if one permit. Thus, in the Draft Modeling Approach Table 1, Reclamation shows seven upstream junior stream water rights.

[74] Okla. Stat. Tit. 82 § 105.13 **Seasonal, temporary, term and provisional permits** (2011). The statutory language of § 105.13 makes clear that senior prior appropriation rights are protected from seasonal, temporary, term, and provisions permits: "… All seasonal, temporary, term and provisions temporary permits shall contain a provision making them subject to all rights of prior appropriators. …"

acre-feet in the year 2000.[75] During the drought of 2010-2014, Reclamation identified 51 provisional stream temporary permits averaging 69 acre-feet annually.[76] Of course, LAID's two senior water rights on the NFRR must be distinguished from any LAID junior water right in additional wet-year water, if LAID were to pursue obtaining this additional water right.

With this information about LAID's priority status and competing junior stream water rights, the author now turns to discuss how LAID can protect its senior stream water rights.

a. Protecting senior stream water rights from interference by junior stream water rights

Oklahoma statutes only provide one explicit enforcement mechanism to OWRB to use to protect a senior water-rights holder from a junior water-rights holder. In Okla. Stat. Tit. 82 § 105.20 **Violation**, the unauthorized use of water (i.e. the use of water in violation of the priority between water users) is declared a misdemeanor and subject to civil injunction.[77] Senior water-rights holders can activate § 105.20 by filing a complaint with the OWRB which initiates an investigation and requires the OWRB to respond as to the appropriate action to take.[78] In addition to OWRB action, individual water-rights holders can bring their own law suits to protect their water rights.[79] But as Oklahoma water law history indicates, rarely does anyone invoke either of these two statutes for enforcement of water rights. Criminal actions, civil injunctions or

[75] OWRB (A. Mackey) e-mail to Reclamation (July 25, 2016) containing the textual information.

[76] L-A Status Quo Water Availability Figure 3 at p. 10.

[77] Okla. Stat. Tit. 82 § 105.20 (2011). Section 105.20 ends with this sentence: "The Board and its authorized agents shall have a reasonable right to go upon private property in the performance of their duties hereunder and shall have the duty to file complaints of violations of the penal provision of this section."

[78] Okla. Admin. Code § 785:1-11-1 (2014).

[79] Okla. Stat. Tit. 82 § 105.5 (2011).

private lawsuits certainly have an enforcement role, but these methods are costly, time-consuming, and, most importantly, very likely to be too slow and too ineffective in actually protecting a senior stream water right from interference.

The Legislature has granted OWRB expansive powers over the waters of the state. In accord with Okla. Stat. Tit. 82 § 1085.2, OWRB has the authority:

> "1. Generally to do all such things as in its judgment may be necessary, proper or expedient in the accomplishment of its duties; …
> 7. To promulgate such rules and make orders as it may deem necessary and convenient to the exercise of any of the powers of the performance of any of the duties conferred or imposed upon it by this or any other law;
> 8. To institute and maintain, or to intervene in, any actions or proceedings in or before any court, board, commission or officer of this or any other state or the United States to stop or prevent any use, misuse, appropriation or taking of any of the water of this state which is in whole or in part in violation of any law, or any rules, orders, judgments or decrees of any court, board …"

OWRB has used this broad authority to impose conditions upon water rights at the time of application and after issuance of a permit, when necessary to promote beneficial use of Oklahoma water.[80] Similarly, OWRB may be able to use this broad authority to create an administrative procedure to prevent or to stop a junior water-rights holder from interfering with a senior water right. If OWRB were to create such an administrative procedure what might the administrative procedure contain?

The author believes that OWRB has the authority to adopt regulations that are specific to situations that are most likely to present issues regarding the protection of senior stream water rights. In other words, the author believes that OWRB does not have to adopt regulations about

[80] See, Okla. Att'y Gen. Op. 72-253 (Jan. 12, 1073) (affirming that OWRB can impose time-of-use conditions upon regular permits for water.)

interference by junior water rights that are applicable statewide and in every conflict situation between seniors and juniors.[81] Most importantly for Lugert-Altus Reservoir, the author believes that OWRB has the authority to draft regulations specific to the water rights of LAID.

Focusing on LAID and its water rights, OWRB, Reclamation, and LAID could work together to identify interference triggers that take into account the relevant hydrological conditions and needed reservoir yields specific to the NFRR and Lugert-Altus Reservoir.[82] Once the triggers are identified, OWRB could write those triggers into its regulations.[83] Thus, OWRB, Reclamation, and LAID could work together to develop interference regulations for Lugert-Altus Reservoir.[84]

Yet, when Reclamation, OWRB, and LAID did hydrological modeling of the stream water for the NFRR, the Report concluded, "The impacts of reservoir inflows resulting from

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[81] OWRB may well be wise to leave disputes between most individual water-rights holders to those individuals themselves through the filing of private litigation under Okla. Stat. Tit. 82 § 105.5 (2011).

[82] Reclamation, OWRB and Mountain Park Master Conservancy District (MPMCD) collaboratively prepared an analysis of drought indices and triggers related to Tom Steed Reservoir. Reclamation and OWRB, Upper Red River Basin Study: Formulation of Curtailment Alternatives in the Tom Steed Reservoir Hydrologic Basin (Draft January 2021). Similarly, Reclamation, OWRB, and LAID could collaborate to prepare an analysis of drought indices and triggers related to Lugert-Altus Reservoir.

Additional modeling of groundwater and stream water interconnections that identifies specific wells as having the most impact on base flow and inflow might also assist OWRB, LAID and Reclamation in developing interference triggers. The United States Geological Service (USGS) has presented such a proposal to Reclamation for modeling that would undertake to identify the impact of specific, identified wells on base flow and the inflow in the catchment basins providing water to Fort Cobb Reservoir. USGS, *Simulated Effects of Groundwater Withdrawals on Streamflow Depletion in Rush Springs aquifer upgradient from Fort Cobb Reservoir, western Oklahoma* (April 3, 2020) [hereafter USGS Simulated Effects April 2020].

[83] In adopting regulations about interference, OWRB must comply with the Oklahoma Administrative Procedure Act and other statutes governing the adoption of regulations. The author does not address these procedural requirements for the valid adoption of regulations.

[84] The author envisions an OWRB chapter on interference specific to LAID's senior water right. LAID could invoke the procedures of this specific chapter.

applying "Seniority" to stream water use are negligible – this is because junior permit volumes are so small relative to the volume of inflow."[85]

There is yet one more factor to consider in this discussion about an interference regulation. OWRB has concluded that there is no unappropriated water on the NFRR above Lugert-Altus Reservoir.[86] Thus, no new junior stream water-rights holders should come into existence against whom LAID would need protection for its water rights through an interference regulation.

In light of the negligible impact that existing junior stream permit water-rights have upon Lugert-Altus Reservoir, along with the fact that the NFRR above Lugert-Altus Reservoir is closed to new regular stream water permits, it appears unnecessary to go through the complex and time-consuming process of drafting interference regulations to protect LAID's two senior water rights. By having a negligible impact, according to the hydrological model of the NFRR, the presently existing junior stream water-right holders might not be interfering factually with LAID's water rights. And by not interfering factually, OWRB and courts could possibly conclude that the junior stream water-right holders are not interfering legally with LAID's water rights.[87]

There is another implication to the fact that junior stream water-right holders have a

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[85] L-A Status Quo Water Availability, Figure 6 (2) at p. 19.

[86] Draft Upper Red River Basis Study Report (March 2020) at pp. 152-158; OCWP, Southwest Watershed Planning Region Report at p. 11 (ver. 1.1, 2012).

[87] For a brief discussion of the "futile-call" doctrine in prior appropriation law, D. Getches, WATER LAW IN A NUTSHELL (4th ed. 2009) at pp. 110-111.

negligible impact on the inflows to Lugert-Altus Reservoir. If LAID were to apply for a new additional water right to very wet-year water, such as occurred in 2000, these presently existing junior stream water-rights would also have negligible impact upon LAID's new water-right for wet-year water. Thus, even though LAID's new water right legally would be the most junior water right on the NFRR, LAID's new water right would be a meaningful water right that occasionally would result in Lugert-Altus Reservoir having additional "wet" water in storage. LAID's new water right would not just be a "paper" water right.

If OWRB were to draft regulations specifically focused on Lugert-Altus Reservoir, there is one hydrological factor that OWRB must clearly take into consideration – the annual average evaporation from the Reservoir. As OWRB no longer allows annual average evaporation to be part of the permitted amount of water, OWRB should account for evaporation when setting the trigger for interference. Without taking into account the annual evaporation loss, the interference trigger might not come into existence until, literally, the water needed to protect the senior water rights in the Reservoir capacity have evaporated. LAID needs "wet" water within the Reservoir in order to fulfill its project and contractual water supply obligations. In fact, Reclamation has estimated that Lugert-Altus Reservoir needs approximately 115,000 acre-feet of water in storage to assure that LAID can fulfill its project and contractual water supply obligations.[88] To this author's mind, this needed "wet" water will exist in the Reservoir only if OWRB accounts for the hydrological condition of evaporation in any interference regulation.

b. Protecting Regular Permits from Seasonal, Temporary, Term and Provisional Permits

[88] Draft URRBS March 2020 at pp. 83-84.

In 1972, the Legislature enacted the following statutory language:

> "OWRB is authorized to issue, in addition to regular permits, seasonal, temporary, term, or provisional temporary permits at any time the Board finds such issuance will not impair or interfere with domestic uses or existing rights of prior appropriators and may do so even when it finds no unappropriated water is available for a regular permit. All seasonal, temporary, term and provisional temporary permits shall contain a provision making them subject to all rights of prior appropriators."[89]

From the statutory language, OWRB's authority to grant non-regular permits is discretionary and each non-regular permit must make them subject to all rights of prior appropriators. LAID complained that OWRB continued to grant non-regular permits, during the drought of 2010-2014, even though, according to LAID, those non-regular permits were impairing and interfering with its senior water rights.

If OWRB adopted interference regulations specific to Lugert-Altus Reservoir, as discussed above in Part III.a, OWRB could also address interference by non-regular permits with regular permits. However, what has just been written about protecting LAID's two water rights from junior stream water-right holders applies also to protecting LAID's two water rights from seasonal, temporary, term and provisional temporary stream permits. Reclamation determined, that OWRB granted, during the drought years 2010-2014, provisional temporary stream permits averaging 69 acre-feet annually. Hence, provisional temporary stream permits are usually even less in amount than junior water-rights and would, therefore, have an even smaller negligible impact. As provisional temporary stream permits factually have minuscule impact on inflows to Lugert-Altus Reservoir, OWRB and courts could conclude that provisional temporary stream

[89] Okla. Stat. Tit. 82 § 105.13 (2011).

permits legally do not create interference with LAID's two water rights.

Of course, OWRB has granted provisional temporary stream permits for as large an amount as 6,491 acre-feet in one year (Year 2000). Should LAID seek to have OWRB draft interference regulations related to provisional temporary stream permits in anticipation of years such as Year 2000? The author concludes that answer likely is "No" for two reasons.

First, the Oklahoma statute authorizing provisional temporary stream permits[90] is clear that the OWRB has discretion to grant or not to grant provisional temporary stream permits. Rather than drafting interference regulations, LAID might better protect against interference caused by provisional temporary stream permits by direct communications with OWRB, in appropriate drought years, urging OWRB to exercise its discretionary authority so as to not grant provisional temporary stream permits.

Second, OWRB has recently adopted regulations allocating ownership rights in brackish groundwater[91] to surface landowners overlying the brackish aquifer.[92] Surface owners can grant leases to companies, particularly oil and gas companies, for the use of their brackish groundwater. With a valid lease from surface owners, oil and gas companies can then apply to OWRB for a provisional temporary groundwater permit.[93] Once these regulations become

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[90] Okla. Stat. Tit. 82 § 105.13 (2011).

[91] Okla. Stat. Tit. 82 § 1020.1 (2011) provides the following definition: "'Fresh water' means water which has less than five thousand (5,000) parts per million total dissolved solids. For the purpose of this [Groundwater Law] all other water is salt water."

Brackish water has between 5,000 and 10,000 ppm of total dissolved solids.

[92] Okla. Admin. Code (Proposed Regulations) § 785:30-5-10 **Marginal Water Permits** (2020). *See*, J. Mooney, *'Marginal' water eyed for wider use*, THE OKLAHOMAN at A12 (Feb. 19, 2020). These new OWRB regulations are not yet legally effective because the Legislature and Governor must still approve.

[93] Okla. Stat. Tit. 82 § 1020.10 (2011) – authorizing provisional temporary groundwater water permits.

legally effective, LAID can urge OWRB to grant provisional temporary groundwater permits, from brackish aquifers that have no impact on NFRR base flows, rather than provisional temporary stream permits from NFRR alluvial aquifers.

c. Dry-Year Option – Non-regulatory protection for stream water right(s)[94]

Reclamation reservoirs also have an alternative way of protecting their water rights through the use of dry-year option leases. A dry-year option lease is: "A long-term lease agreement that maintains water in the original use in most years, but provides an intermittent water supply to other uses under preset conditions."[95]

Junior water-right holders use dry-year leases to have seniors forbear from using their senior water right on a stream. Consequently, more water remains in the stream for the junior to obtain additional water. However, LAID is the senior stream water-rights holder on the NFRR. For LAID, therefore, dry-year option leases are not a meaningful alternative.[96]

IV. LUGERT-ALTUS IRRIGATION DISTRICT STREAM WATER RIGHTS AND GROUNDWATER

a. Oklahoma Groundwater Law and Lugert-Altus Reservoir

The Oklahoma Comprehensive Water Plan correctly and succinctly states, "With the exception of the Arbuckle-Simpson aquifer system, conjunctive management of supplies is not

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[94] LAID has a stream water right under OWRB Final Order 4. LAID may acquire a new, additional water right for all unappropriated water in the NFRR above the Reservoir. Hence, the author used the words "water right(s)" in this heading about non-regulatory protection.

[95] Environmental Defense Fund, *Alternative Water Transfers in Colorado: A Review of Alternative Transfer Mechanisms for Front Range Municipalities* at p. 13 Table 1 (Nov. 2016). [hereinafter cited EDF Alternatives].

[96] By contrast, with respect to junior water-right holders, LAID would seek to use interference regulations to require juniors to quit taking water from the stream. However, as previously discussed in this chapter, junior stream water rights have negligible impact on the inflows to Lugert-Altus Reservoir.

mandated under Oklahoma water law."[97] Expanding the meaning of this quoted sentence, Oklahoma water law mandates public sovereignty of water in definite streams (prior appropriation)[98] and, concurrently, mandates private ownership of groundwater (allocated ownership to landowners overlying an aquifer).[99] Applying these two preceding sentences to LAID means that OWRB manages LAID's vested rights in the stream waters of the NFRR independently and separately from overlying landowner groundwater rights in the alluvial and bedrock aquifers of the NFRR catchment basins. OWRB properly follows Oklahoma water law for independent and separate management of surface water and groundwater even though OWRB also acknowledges:

> "... water resources may be hydraulically connected and the uses of each can affect the other water resource. In other words, the pumping of groundwater could have an effect on a stream if the aquifer and stream are hydraulically connected. Likewise, the diversion of surface water could also have an effect on the aquifer's long-term water supply."[100]

To the author's knowledge, there are two possible legal arguments to reclassify certain, specified Oklahoma groundwater (i.e. water under the surface of the earth) as stream water. If these certain, specified waters were, in Oklahoma law, stream waters, OWRB would then be

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[97] OWRB, Oklahoma Comprehensive Water Plan 2011 Update: Technical Memorandum: Conjunctive Water Management in Oklahoma and Other States (Nov. 2010) at p. 4 [hereinafter cited TechMemo Conjunctive Water Management].

[98] Okla. Stat. Tit. 82 §§ 105.1 through 105.33 (Stream Water Use) (2011).

[99] Okla. Stat. Tit. 60 Okla. Stat. § 60 **Ownership of Water – Use of Water** (2011); Okla. Stat. Tit. 82 §§ 1020.1 through 1020.22 (Oklahoma Groundwater Law) (2011). In § 1020.1 **Definitions**: "'Groundwater' means fresh water under the surface of the earth regardless of the geologic structure in which it is standing or moving outside the cut bank of any definite stream."

[100] TechMemo Conjunctive Water Management at p. 4.

mandated to manage these reclassified waters using Oklahoma's prior appropriation laws. Note that this reclassification of certain, specified Oklahoma groundwater as stream water would not mean that OWRB is engaged in conjunctive management of stream water and groundwater. Rather, this reclassification simply would move certain, specified Oklahoma groundwater from management under the groundwater laws to management under the stream water laws.

The two possible legal arguments are:

1) The Legislature impermissibly moved alluvial waters from being public waters to private ownership waters in 1967 and 1972 amendments to Oklahoma's water laws – the alluvial waters argument.[101]

2) Oklahoma water law could make a distinction between gaining streams (groundwater movement) and losing streams (stream water movement) – the losing stream argument.[102]

If alluvial waters and losing stream waters were reclassified as stream water under

[101] For discussion of the alluvial waters argument, read Chapter 2 OKLAHOMA LAW, Ground water defined, especially the text accompanying footnotes 128-134.

[102] Gaining streams are gaining waters from the surrounding groundwater aquifer whether an alluvial aquifer or a bedrock aquifer or both. Losing streams are losing waters to the surrounding groundwater aquifer. Under Oklahoma water law, as soon as water from a losing stream moves past the cut bank of the definite stream into the surrounding geological formation, the water is groundwater. [*See*, footnote 99 for the Oklahoma definition of "Groundwater."] If a landowner were using a well that increased the loss of water from the stream to the surrounding groundwater aquifer, it could be argued that the landowner is taking steam water, not groundwater. In effect, the landowner's pumping is increasing the magnitude of the loss of water from the losing stream and is, as if, the landowner has placed the pump directly into the stream bed itself.

It should also be remembered that a stream can be a "gaining" stream in one segment of its reach and be a "losing" stream in another segment of its reach. Or, also hydrologically plausible, during certain months of the year, the stream could be a "gaining" stream and in other months of the year, the stream could be a "losing" stream. To write the obvious, the interrelationship between streams and aquifers is a very complex hydrology.

Oklahoma water law,[103] LAID gains several advantages.

First, LAID has the two most senior water rights on the NFRR, dating from 1925 and 1939 respectively. By having these early priority dates, LAID has seniority over every competing claimant to the stream waters of the NFRR. Thus, if groundwater withdrawals, through groundwater wells, were reclassified as stream water withdrawals, every groundwater pumper above Lugert-Altus Reservoir, except two, would also be junior to LAID's water rights. In this regard, it is important to know that OWRB has identified 381 groundwater permits above Lugert-Altus Reservoir with total permitted groundwater rights in the amount of 102,864 acre-feet per year. OWRB indicates that two groundwater permits are prior to 1939 (806 acre-feet/year) and 379 groundwater permits are since 1939 (102,058 acre-feet/year).[104]

Second, with senior rights, LAID would have a significant incentive to urge OWRB to develop interference regulations specific to its water rights against junior (now mostly identified

[103] These two legal arguments about reclassifying alluvial waters and losing stream waters involves the interpretation of multiple Oklahoma water law statues. Thus, the reclassification arguments are not specifically directed to the interaction between the surface and groundwater of the NFRR basin. Consequently, reclassifying alluvial waters and losing stream waters would have a statewide impact. And assuredly, any reclassification would become Oklahoma water law only after litigation and a definitive Supreme Court of Oklahoma opinion. Reclassification presents significant and difficult legal issues about property rights in water in Oklahoma. *See especially*, Okla. Stat. Tit. 60 § 60 (Ownership of water – Use of Water) (2011). For purposes of this portion of the chapter, the author has assumed a definitive Supreme Court opinion reclassifying these waters -- and then discusses the meaning for LAID.

[104] OWRB, Lugert-Altus Reservoir Summary Fact Sheet (no date) available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43.

In another dataset, OWRB data on groundwater permits in the NFRR aquifer does not distinguish groundwater permits above the Lugert-Altus Reservoir and below the Reservoir but rather lists groundwater permits in the entire NFRR aquifer. In this dataset, OWRB identified 480 groundwater well permits totaling 96,330 acre-feet/year dedicated to approximately 30 percent (i.e., 145,940 acres) of the total land area overlying the NFRR aquifer. https://www.owrb.ok.gov/maps/PMG/owrbdata_WR.html.

Depending upon the hydrological interconnection between the NFRR aquifer and the inflow to the Lugert-Altus Reservoir, it may not be correct, as the author has done, to distinguish between groundwater wells above and those below Lugert-Altus Reservoir. Groundwater wells in an aquifer of a losing stream may not reduce inflows in the same spatial manner as stream water diversions above and below the Reservoir.

as groundwater pumpers) water-right holders – specifically those taking losing-stream waters -- that under present Oklahoma water law is considered groundwater, but now reclassified as stream water, if the above two legal arguments were found to be valid by Oklahoma courts.[105]

In Chapter 2 on Background Law, OKLAHOMA LAW, Ground water defined, the author discussed these two reclassification arguments and, therefore, does not repeat these arguments and authorities here. For purposes of this chapter, what is most important is that, to the author's knowledge, neither of these two legal arguments have ever been presented to Oklahoma courts.[106] Consequently, if LAID wanted to protect its surface water rights by reclassifying alluvial waters and losing stream waters as stream water, LAID likely has to pursue litigation to accomplish this reclassification. LAID would have to evaluate the wisdom of bringing such a lawsuit, the practical considerations related to bringing such a lawsuit, and the likelihood of prevailing in such a lawsuit. The author does not believe that his remit for this academic research report includes discussing the wisdom, practical considerations, and likelihood of success of a reclassification lawsuit. The author believes his remit ends with bringing this reclassification issue to the attention of the study partners – OWRB, Reclamation and LAID.

Focusing specifically on the losing stream argument, two questions deserve further

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[105] Of course, the author understands that the discussion in this paragraph presupposes that the aquifers in the NFRR catchment basin do, in fact, have a hydrological connection to the two streams. This may well be true for an alluvial aquifer but may well not be true for a bedrock aquifer. Again, to write the obvious, the interrelationship between streams and aquifers is a very complex hydrology. *See e.g.*, S. Smith, J. Ellis, D. Wagner, and S. Peterson, 2017. HYDROGEOLOGY AND SIMULATED GROUNDWATER FLOW AND AVAILABILITY IN THE NORTH FORM RED RIVER AQUIFER, SOUTHWEST OKLAHOMA, 1980-2013 (USGS Scientific Investigations Report 2017-5098). This USGS Scientific Investigation was prepared in cooperation with OWRB. [hereinafter cited as USGS Rep. 2017-0598]

[106] Two Oklahoma Supreme Court decisions discuss the distinction between stream water and groundwater: *Messer-Bowers Co., Inc. v. State ex. rel. OWRB*, 2000 OK 54, 8 P.3d 877; *OWRB v. City of Lawton*, 1977 OK 89, 580 P.2d 510.

discussion as relevant questions:

1) Does groundwater pumping have a measurable impact on the Lugert-Altus Reservoir?; and,

2) Does the hydrology of the NFRR and its alluvial aquifer factually support a losing stream reclassification argument?

From modeling conducted by United States Geological Service (USGS), the Question 1 answer is "yes" – groundwater pumping does have a significant impact upon Lugert-Altus Reservoir. If there were no groundwater pumping, the model shows that the NFRR base flow would be 56,683 acre-feet per year. Using groundwater pumping data from the year 2013, the model shows the NFRR base flow falls by 12,700 acre-feet per year to total base flow of 43,983 acre-feet per year. Thus groundwater pumping in 2013 meant a 22% reduction in base flow on the NFRR that year.[107] Moreover, the model shows that the reduction in NFRR base flow negatively impacts the reliability of an irrigation water supply from LAID to its district farmers.[108] As Reclamation concluded in its Draft Report, "Results suggest that irrigation permit dependability can be attributable to groundwater permitting and development in the NFRR aquifer."[109] Or as stated elsewhere in the Draft Report, "Results demonstrate that impacts from existing upstream groundwater are measurable, and that full development of the NFRR aquifer

[107] The data presented in this sentence and the preceding two sentences can be read in USGS Rep. 2017-5098 Table 16 at p. 74 (*Changes in groundwater storage and mean annual base flow after 50 years of groundwater pumping at selected rates for the North Fork Red River aquifer southwest Oklahoma*). *See also*, L-A Status Quo Water Availability at p 14 and in Table 3 at p. 15.

[108] L-A Status Quo Water Availability Table 5 at p. 21 and Figure 8 atp. 22.

[109] L-A Status Quo Water Availability Figure 8 Comment (3) at p. 22.

would result in additional impact to the reliability of Lugert-Altus irrigation water supply."[110] LAID thus has legitimate concern that groundwater pumping from the NFRR alluvial aquifer negatively affects its water rights.

In addressing Question 2, apparently the answer is "yes" that the NFRR is a losing stream. USGS has prepared a hydrological map of the NFRR showing the NFRR as a losing stream from the Texas border to the Lugert-Altus Reservoir.[111] Similarly, Reclamation and OWRB sponsored a study that found that beginning with the month of May and through the summer months, the NFRR is a losing stream on all its segments.[112] During non-summer months, this same report concluded that the NFRR is a gaining stream.[113] The time-period when the NFRR is a losing stream coincides with the months when ground water pumping is greatest for crop irrigation and municipal use.[114] Thus, one could conclude the negative impact of groundwater pumping upon Lugert-Altus Reservoir is not because groundwater pumpers are taking water moving through the NFRR alluvial aquifer toward the river (a gaining stream).

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[110] L-A Status Quo Water Availability Figure 11 at p. 25. Results similar to the Draft Modeling Approach are also found in Ochsner et al, *Threats to the Lugert-Altus Irrigation District: Untangling the Effects of Drought, Land Use Change, and Groundwater Development* (USGS 104b Project FY2015, Feb. 29, 2016). (hereafter Ochsner Report).

[111] USGS Rep. 2017-5098, Figure 18 *Base-flow measurements with gaining and losing reaches of the North Fork Red River and tributaries, March 2013* at p. 36.

[112] C. Stephens, W.C. Austin Project, Oklahoma Water Availability Assessment – Final Report (2003) at pp. 29-31. (hereafter Stephens Report 2003).

[113] Stephens Report 2003 at pp. 11 & 14.

[114] Ochsner Report at p. 15 states, "... Groundwater use for irrigation and non-irrigatioin in the Oklahoma portion of the watershed [NFRR] were 74% and 18% higher, respectively, during the low flow period from 2000-2004 than during the previous high flow period. ... which is consistent with a connection between groundwater use and inflow. The connection may be especially strong in the Oklahoma portion of the watershed because the close proximity of the alluvial aquifer (and therefore groundwater withdrawal) to the stream [NFRR]."

Rather, one could conclude that groundwater pumpers are taking water that is flowing from the NFRR into the alluvial aquifer (a losing stream) as crop irrigation and municipal use increases in the summer months.

If the NFRR is a losing stream and if losing water were reclassified as stream water under Oklahoma law, the impact of groundwater pumping upon Lugert-Altus Reservoir is of sufficient magnitude that OWRB, Reclamation, and LAID could have an incentive to work together to adopt interference regulations specific to protecting LAID's senior water rights on the NFRR.[115] OWRB could use hydrological information (drought conditions and reservoir level) and LAID's defined water rights (the required dependable yield) to identify triggers for interference that both protect LAID's senior water rights from interference while maximizing beneficial use for junior groundwater pumpers from the NFRR alluvial aquifer.[116] In developing interference regulations specific to Lugert-Altus Reservoir, OWRB could also address provisional temporary

[115] Above in Chapter Four Part III.a, the author discussed OWRB's legal authority to draft interference regulations and the collaborative approach by which to do so.

As also discussed earlier in Chapter Four Part III.a, OWRB, Reclamation, and LAID do not have an strong incentive to draft interference regulations to address junior stream water permits because the impact of junior stream water permits is negligible for the water flowing into Lugert-Altus Reservoir. The incentives become much stronger if "losing water" were reclassified from groundwater to stream water.

[116] Reclamation, OWRB, and the Districts have developed a document for Tom Steed Reservoir about drought indices and triggers. Reclamation and OWRB, Upper Red River Basin Study: Formulation of Curtailment Alternatives in the *Tom Steed Reservoir Hydrologic Basin* (Draft, January 2021). This Tom Steed Reservoir Analysis could be used as a template for Lugert-Altus Reservoir; or, alternatively, Reclamation, OWRB and the Districts could develop a drought-indicators and drought-triggers document specific to Lugert-Altus Reservoir itself.

Additional modeling of groundwater and stream water interconnections that identifies specific wells as having the most impact on base-flow and inflow might also assist Reclamation, OWRB, and the Districts in developing interference triggers. The United States Geological Service (USGS) has presented such a project proposal to Reclamation for modeling that would undertake to identify the impact of specific, identified wells on base-flow and the inflow in the catchment basins providing water to Fort Cobb Reservoir. USGS, *Simulated Effects of Groundwater Withdrawals on Streamflow Depletion in the Rush Springs aquifer upgradient from Fort Cobb Reservoir, western Oklahoma* (April 3, 2020). [hereafter USGS Simulated Effects April 2020]. *See also*, Draft URRBS March 2020 at pp. 138-142 (Measuring Streamflow Response to Groundwater Pumping).

groundwater permits so as to control OWRB's discretion in granting these temporary permits during drought periods.[117] If OWRB develops interference regulations based on this approach, the author believes that OWRB would have defensible interference regulations in hydrology and in Oklahoma water law.

If Reclamation, LAID and OWRB were to begin to discuss creating interference regulations addressing LAID's senior NFRR water rights and groundwater pumpers of losing waters, the discussion would raise many difficult issues. Most importantly from OWRB's perspective, discussions about adopting interference regulations between LAID and groundwater pumpers from the NFRR alluvial aquifer starkly presents the policy issue of favoring stream water rights over groundwater pumpers within the prior appropriation system of Oklahoma water law. While the logic of priority/seniority, a foundational principle of prior appropriation, means that OWRB should favor LAID's water rights, the issue is so fraught with hydrological factual disputes, policy and political concerns that OWRB may conclude that only the Oklahoma legislature should decide the issue. Only once has the Oklahoma Legislature addressed an analogous interconnection between streams and aquifers.[118] In that instance, the Legislature

[117] During the drought years 2010-2014, Reclamation identified 43 provisional temporary groundwater permits totaling 2,253 acre-feet, meaning an average of 451 acre-feet annually. The amount of groundwater pumped in accordance with provisional temporary groundwater permits is a small percentage when compared to groundwater pumped in accordance with regular ground water permits. L-A Status Quo Water Availability Bullet Point 6 at p. 29.

[118] The analogous situation is the "sensitive sole source groundwater basin" – i.e., the Arbuckle-Simpson aquifer of south-central-east Oklahoma. Okla. Stat. Tit. 82 §§ 1020.2(C), 1020.9(A)(2)(d), 1020.9a (2011). *See also*, *Jacobs Ranch, L.L.C. v. Smith*, 2006 OK 34, 148 P.3d 842 (litigation relating to the "sensitive sole source groundwater basin" statutes).

adopted statutes containing language explicitly preferring streams and stream water rights.[119] But it is obviously unclear how the Legislature would decide in the context of the arid, agricultural setting of southwestern Oklahoma when the competing claimants are primarily surface irrigation farmers in LAID and groundwater irrigation farmers on lands overlying the NFRR alluvial aquifer.[120]

b. Oklahoma Groundwater Law and Lugert-Altus Irrigation District stream water rights

In the immediately preceding PartIV.a of this Chapter, the author assumed that losing water could be reclassified as stream water and, therefore, become subject to regulation under Oklahoma's prior appropriation stream water laws. In this PartIV.b, the author returns to the present actual classification of losing water under Oklahoma water law – that is, losing water is groundwater[121] subject to the Oklahoma groundwater laws.[122] As groundwater, OWRB would regulate groundwater pumpers independently from stream water rights held by LAID. As already stated, Oklahoma water law does not mandate conjunctive management between groundwater and stream water.[123]

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[119] The Legislature mandated that the OWRB develop a MAY for the Arbuckle-Simpson aquifer that "will ensure that any permit for the removal of water from [the A-S aquifer] will not reduce the natural flow of the water from springs or streams emanating from said basin or subbasin." Okla. Stat. Tit. 82 § 1020.9A(B)(2) and § 1020.9B(B) (2011).

[120] The author realizes that there are municipalities with groundwater permits from the NFRR alluvial aquifer and the City of Altus with a water right to water stored in Lugert-Altus Reservoir. But the municipal water rights are smaller in amount than the water rights of the competing irrigation farmers.

[121] Okla. Stat. Tit. 82 § 1020.1 **Definitions**: "'Groundwater' means fresh water under the surface of the earth regardless of the geologic structure in which it is standing or moving outside the cut bank of any definite stream."

[122] Okla. Stat. Tit. 82 §§ 1020.1 through 1020.22 (Oklahoma Groundwater Law) (2011).

[123] TechMemo Conjunctive Water Management at p. 4.
The NFRR alluvial aquifer is the focus of the discussion in the text. The author acknowledges that NFRR catchment basin overlies two minor bedrock aquifers – the Southwestern Oklahoma and the Western Oklahoma aquifers.

Of course, as the OWRB acknowledges, the fact that Oklahoma water law does not mandate conjunctive management does not mean that steams and aquifers are not hydraulically connected.[124] In fact, as Reclamation, OWRB, and USGS studies clearly establish, the NFFR and the NFRR alluvial aquifer are interconnected and do impact one another to a significant degree.[125]

In the Reclamation and OWRB Modeling of the Lugert-Altus Reservoir,[126] the report indicates the following impact of five scenarios of groundwater pumping upon the base flow of the NFRR:

– without any groundwater pumping, the Model estimates that the base flow of the NFRR is 56,683 acre-feet per year;

– with a groundwater pumping rate, as reported to OWRB in 2013, the base flow of the NFRR is 43,893 acre-feet per year. This means at 12,700 acre-feet per year reduction in base flow (i.e. a 22% reduction);

– with groundwater pumping rate, as projected by OWRB in 2060, the base flow of the NFRR is 42,272 acre-feet per year. This means a 14,411 acre-feet per year reduction in base

OWRB considers both so thinly saturated that neither can support wells for other than limited domestic use. Contribution, if any, to the base-flow of the NFRR or inflow to the Lugert-Altus Reservoir is very small in amount. Minor bedrock aquifers produce less than fifty gallons per minute in wells. Okla. Admin. Code § 785:30-1-2 **Definitions** "Minor groundwater basins" and "Major groundwater basin."

[124] TechMemo Conjunctive Water Management at p. 4.

[125] The interconnection between NFRR and the NFRR alluvial aquifer is made very clear in, at least, three recent reports: USGS Rep. 2017-0598; Ochsner Report (2016); and Stephens Report 2003.

[126] L-A Status Quo Water Availability at p. 14 and Table 3 at p. 15 presents five scenarios (naturalized, 2013 pumping rate, 2060 projected pumping rate, 50-year aquifer life span EPS, and 20-year aquifer life span EPS).

flow (i.e. a 25% reduction).

– with a groundwater pumping rate of a 50-year life span for the NFRR alluvial aquifer of 0.52 acre-feet per year equal proportionate share (EPS)[127] for every acre overlying the alluvial aquifer (referred to as a full use scenario), the base flow of the NFRR is zero. This means a 56,683 acre-feet per year reduction in base flow (i.e. a 100% reduction); and finally

– with a groundwater pumping rate of a minimum 20-year life span for the NFRR alluvial aquifer of 0.59 acre-feet per year EPS for every acre overlying the alluvial aquifer (referred to as a full use scenario), the base flow of the NFRR is zero. This means a 56,683 acre-feet per year reduction in base flow (i.e. a 100% reduction).

In light of these just-described five groundwater scenarios, how might LAID think about interacting with OWRB about maximum annual yield (MAY) and equal proportionate share (EPS) determinations for groundwater aquifers?

First, it is important for LAID to understand that OWRB has already determined vested water rights for existing groundwater pumpers. For groundwater pumpers who hold regular permits in the NFRR aquifer, OWRB set a 1.0 acre-feet per year EPS for the NFRR alluvial

[127] OWRB manages groundwater through four steps: 1) conduct hydrological surveys and investigations of groundwater aquifers to gather information. Okla. Stat. Tit. 82 § 1020.4 (2011); 2) based on the surveys and investigations, set a tentative maximum annual yield (MAY) for each aquifer based upon a minimum life of twenty years for the aquifer. Okla. Stat. Tit. 82 § 1020.5 (2011).; 3) hold hearings to establish a final MAY for the aquifer which is then allocated to each acre of land overlying the aquifer thereby giving each overlying landowner an equal-proportionate share (EPS) in the waters of the aquifer. Okla. Stat. Tit. 82 § 1020.6 (2011); 4) accept and rule upon applications from overlying landowners who are seeking a permit for beneficial use of their allotted EPS through a groundwater well. Okla. Stat. Tit. §§ 1020.7 through 1020.9 and 1020.15 (2011).

aquifer.[128] By statute, OWRB is mandated to redetermine MAY and EPS every 20 years[129] but OWRB is prohibited from reducing the EPS of those overlying landowners who have already gained a groundwater permit under a prior MAY and EPS determination.[130] For those groundwater pumpers who hold prior-rights in groundwater, OWRB determined these prior-rights at the same time as setting the MAY/EFS for the NFRR aquifer.[131] Consequently, the presently existing groundwater permit holders in the NFRR alluvial aquifer have a vested groundwater right that cannot be diminished. The amount and size of present groundwater

[128] OWRB issued a final order on September 8, 1981 establishing an EPA of 1.0 acre-feet per year per acre for the NFFR alluvial aquifer. USGS, Simulated Effects of Groundwater Withdrawals on Base Flow Depletion in the North Fork Red River Upgradient from Lake Altus, Oklahoma (2017) at p. 9. (hereafter USGS Simulated Effects).

[129] Okla. Stat. Tit. 82 § 1020.4 (2011). OWRB undertakes these reviews and updates as OWRB considers necessary. Okla. Admin. Cod § 785: 30-9-5 (2014).

[130] Okla. Stat. Tit 82 § 1020.6(D) (2018 Supp).

[131] Prior-right groundwater pumpers are those landowners who acquired groundwater rights in accordance with Oklahoma water law that pre-dated the Groundwater Law that became effective on July 1, 1973. Okla. Stat. Tit. 82 § 1020.14 (Prior Use of Groundwater) (2011), as implemented by the OWRB in Okla. Admin. Code Tit. 75, Ch. 30 (Taking and Use of Groundwater), Subchapter 11 (Recognition of Prior Rights to Groundwater) (2014).

The OWRB dataset on groundwater rights in the NFRR aquifer shows that 229 pumpers have prior-rights and 251 have permits under the 1973 Groundwater Law. https://www.owrb.ok.gov/maps/PMG/owrbdata_WR.html

Under the provisions of the 1949 law, groundwater pumpers could apply for recognition of groundwater usage through procedures involving the OWRB and/or court adjudications. Okla. Stat. Tit. 82 §§ 1005-1014 (Supp. 1949). However, the 1949 Oklahoma groundwater law limited water usage to "the safe annual yield measured by the average annual recharge …" Okla. Stat. Tit. 81 § 1007 (Supp. 1949). If groundwater usage exceeded the safe annual yield, then OWRB had the power "to require persons to cease such excessive withdrawals in reverse order of their priority rights." Okla. Stat. § 1015 (Supp. 1949).

Furthermore, the author does not know to what extent, OWRB made the 1949 Groundwater Law operationally effective between 1949 and 1973 when the present groundwater law came into existence. To establish a water right under the 1949 law, groundwater pumpers had to fulfill specified procedural requirement and obtain administrative and/or judicial recognition. If groundwater pumpers did not fulfill these procedural requirements, then groundwater pumpers may not be able to claim any "prior use" rights under the 1949 Groundwater Law and to assert them as protected under the 1973 Groundwater Law in accord with Okla. Stat. Tit. 82 § 1020.14 (2011).

In light of the comments about the 1949 Groundwater Law from the two preceding paragraphs, the author expresses uncertainty about how legally stable and viable are the claims for "prior use" rights under the 1949 Groundwater Law. See, J. Rarick, *Oklahoma Water Law, Ground or Percolating in the pre-1971 Period*, 14 Okla. L. Rev. 403, 417-424 (1971).

permits thus assuredly mean that if every present groundwater permit holder fully utilized the already granted, vested groundwater permits, the NFRR would have significantly diminished base flow and the inflows to Lugert-Altus Reservoir would be greatly reduced. However, after OWRB redetermines the MAY and EPS through a 20-year review, those overlying landowners who apply for a new groundwater permit can only gain a groundwater permit in the amount of the redetermined EPS.[132]

Second, it is important for LAID to understand that regardless of the time-frame that OWRB adopts for the NFRR alluvial aquifer (minimum 20-year life span or a longer 50-year life span), when undertaking a 20-year review and redetermination, the data indicates that a 0.59 EPS (20-year life span) or 0.52 (50-year life span) both result in a 100% reduction in NFRR Base flow. LAID almost assuredly prefers a lesser EPS in order to promote a conservation policy[133] about groundwater use but any EPS that OWRB apparently could set under current law for the NFRR aquifer means a 100% reduction in base flow – if the overlying landowners fully use[134] the EPS amount allocated to each and every acre overlying the NFRR alluvial aquifer.[135]

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[132] Okla. Stat. Tit. 82 § 1020.6(D) (2018 Supp.).

[133] Okla. Stat. Tit. 82 § 1088.12 (2013 Supp.) Section 1088.12 is from the Water for 2060 Act that authorized the OWRB to adopt an MAY and EPS for aquifers with an emphasis on conservation so as to use no more fresh water by and after 2060 than Oklahoma used in 2010.

[134] Full development of the EPS in the aquifer could occur in at least two ways: Farmers could irrigate every acre overlying the aquifer; Overlying landowners could sell their groundwater EPS to other users (e.g., municipal or industrial users) who could either transport the aquifer water or withdraw the water at another location through a new well. *See e.g.*, Okla. Admin. Rule 785:30-7 **Changes in Groundwater Rights** (2014).

[135] The NFRR alluvial aquifer is the only aquifer that interacts with the base flow of the NFRR. There are two other aquifers within the catchment basins of the NFRR – the Western Oklahoma minor bedrock aquifer and the Southwestern Oklahoma minor bedrock aquifer – but these do not connect to the NFRR and, consequently, do not affect the base flow of the NFRR or the inflows to Lugert-Altus Reservoir. Oklahoma Comprehensive Water Plan (OCWP), Southwest Watershed Planning Region Report (version 1.1, 2012) at pp. 9-10, table of groundwater resources and map of groundwater resources, respectively. (hereafter OCWP Southwest Report).

In setting a tentative redetermination of the MAY and EPS for the NFFR alluvial aquifer, OWRB must take into account "the rate of recharge to the basin or subbasin and the total discharge from the basin or subbasin."[136] In addition, OWRB must determine a basin life that is a minimum of twenty years.[137] In light of these statutory obligations, OWRB arguably has the authority to consider (to some extent) groundwater and surface water interactions as OWRB sets a MAY and an EPS.[138] If OWRB could set a MAY and an EPS that reflected the groundwater pumping rate for 2013, OWRB would be significantly protecting the base flow of the NFRR. Or if OWRB could set a MAY and an EPS that reflected the projected groundwater pumping rate for 2060, OWRB would be also protecting the base flow of the NFRR.[139]

If OWRB adopted an EPS that seriously threatened the viability of Lugert-Altus Reservoir, especially by reducing the base flow by 100%, the state water law could well be in conflict with federal Reclamation law. Reclamation projects must abide by state water law for water rights. However, Reclamation projects are federal projects and state law cannot undermine the management of federal water projects.[140]

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[136] Okla. Stat. Tit. 82 § 1020.5(A)(4) (2011).

[137] Okla. Stat. Tit. 82 § 1020.5(B) (2011).

[138] *See also*, Okla. Admin. Code § 785:46-17-3(b) (2014). In this antidegradation provision, OWRB indicates that MAY determinations take into consideration the interconnection between baseflow and groundwater withdrawals for purposes of protecting water quality.

[139] The projected pumping rate for 2060 is for an increase in use of water from the alluvial aquifer. An increase in water usage from the aquifer is against the water conservation policy of the Water for 2060 Act, which sets the goal of using no more fresh water in 2060 than used in 2010. Thus, a MAY and an EPS at the projected 2060 pumping rate appears to be a legally disfavored option.

[140] For discussion of the interplay between state water law for water rights and federal management of approved Reclamation projects, read Chapter 2 on **Background Law**, FEDERAL LAW, Reclamation Law.

Third, it is important for LAID to understand that groundwater under the Oklahoma Groundwater Law is the property of the overlying landowner.[141] While the State of Oklahoma has the sovereign power (and exercises that power) to regulate vested rights in groundwater, the State of Oklahoma cannot take away an overlying landowner's property right in groundwater without just compensation. A practical implication of groundwater being private property is that there is no "use it or lose it" attribute to groundwater and Oklahoma groundwater law -- which is quite in contrast to stream water and Oklahoma prior appropriation stream water law.[142]

Therefore, LAID and OWRB must understand that if LAID's water rights and the storage of Lugert-Altus Reservoir are to be protected, LAID and OWRB must engage in educational and water conservation programs that encourages overlying landowners to use groundwater minimally[143] or not at all[144] – and certainly not to anything approaching full utilization of allowable groundwater rights. Possible educational and water conservation activities that might protect the base flow of the NFRR include changes such as irrigation improvements (e.g., drip-irrigation), or crop and variety selection that requires less water while still producing a profitable harvest (e.g., drought-tolerant crops or varieties), or the change from irrigation farming to dry-land farming or pasture ranching. These educational and conservation activities that are outside

[141] *See especially*, Okla. Stat. Tit. 60 § 60 (2011). *See also*, *Jacobs Ranch, LLC. v. Smith*, 2006 OK 34, 148 P.3d 842.

[142] Okla. Stat. Tit. 82 § 105.2 (2011) for stream water: "Beneficial use shall be the basis, the measure and the limit of the right to the use of water ..." Okla. Stat. Tit. 82 § 105.17 **Reversion of water to public** (2011).

[143] Minimally means the scenarios involving the 2013 reported groundwater usage or the OCWP 2060 projected groundwater usage.

[144] "Not at all" usage means the scenario involving the naturalized condition. This is a baseline scenario.

the Oklahoma groundwater legal regime are feasible approaches for LAID and OWRB to protect the Lugert-Altus Reservoir and W. C. Austin Project.[145]

c. Dry-year Option Leases to protect base flow

Thinking in terms of water law management in western states, LAID might consider alternative methods of protecting its water rights. For example, LAID might consider an alternative transfer method commonly called a "dry-year option," meaning "A long-term lease agreement that maintains water in the original use in most years, but provides an intermittent water supply to other uses under preset conditions."[146]

In light of the 480 groundwater-right holders that already exist for 96,330 acre-feet per year from the NFRR alluvial aquifer, the author considers it impractical for LAID to reach a dry-year option lease with all 480 groundwater-right holders. LAID could think of dry-year option leases but most probably would conclude that dry-year option leases with 480 holders are not a viable approach because of

-- the transaction costs of negotiating, managing and enforcing these leases with such a large number of groundwater permits holders;[147]

– the cost of leasing a sufficient number of acres to provide protection to the NFRR base

[145] The author acknowledges that other options exist beyond those mentioned in the text. For a fuller discussion of the options available to LAID, read OCWP Southwest Report at pp. 75-84 (Basin 36) and pp. 85-94 (Basin 37); Conservation Study (1995) *passim*; Draft URRBS March 2020 at pp. 85-86. *See also*, Ochsner Report *passim* for a discussion of conjunctive management of the NFRR and its NFRR alluvial aquifer.

[146] EDF Alternatives at p. 13, Table 1 (classifies dry-year options as an "interruptible water supply agreement."

[147] In 2019, the Oklahoma Legislature passed legislation allowing the creation of "Groundwater Irrigation Districts." Okla. Stat. Tit. 82 §§ 1021.1-1021.7 (eff. Nov. 1, 2019). If a Groundwater Irrigation District were to come into existence in the NFRR aquifer, LAID may have reduced transaction costs by dealing with the District rather than 480 individual groundwater permit holders.

flow and the storage in Lugert-Altus Reservoir; and

– the hydrological uncertainties associated with taking options in any sprecific acreage less than all acres covered by groundwater permits.

If LAID could identify those groundwater pumpers with the greatest impact on the NFRR baseflow and the inflows to the Lugert-Altus Reservoir, then possibly LAID would have a manageable number of landowners with whom to negotiate dry-year leases and sufficient confidence that these dry-year leases would increase the amount of water in storage in the Reservoir. LAID would be looking for groundwater wells within "proximity zones" that clearly influence the baseflow from the NFRR alluvial aquifer into the NFRR itself. Identifying these groundwater pumpers would require additional modeling of the interconnections between the NFRR aquifer, groundwater wells and the NFRR itself.[148]

V. RED RIVER COMPACT

When Congress authorized the W. C. Austin Project, Congress specifically reserved to the States of Oklahoma and Texas the

> "right ... to continue to exercise all existing proprietary or other rights of supervision of and jurisdiction over the waters of all tributaries of the Red River within their borders ..."[149]

Oklahoma and Texas exercised their explicitly recognized jurisdiction by entering into the Red

[148] The United States Geological Service (USGS) has presented such a project proposal to Reclamation for modeling that would undertake to identify the impact of specific, identified wells on base-flow and the inflow in the catchment basins providing water to Fort Cobb Reservoir. USGS Simulated Effects April 2020. *See also,* Draft URRBS March 2020 at pp. 138-142, specifically Scenarios C & D (Measuring Streamflow Responses to Groundwater Pumping).

[149] Flood Control Act of 1938, Public Law No. 761, 75th Cong., Ch. 795 at p. 6 (June 28, 1938).

River Compact of May 1978.[150]

Three provisions of the Red River Compact (RRC)[151] are directly relevant to the W. C. Austin Project and are worth quoting in full.

> "Section 2.01. Each signatory state may use the water allocated by this Compact in any manner deemed beneficial by that state. Each state may freely administer water rights and uses in accordance with the laws of that state, but such uses shall be subject to the availability of water in accordance with the apportionment of this Compact."
>
> "Section 4.01. Subbasin 1 – Interstate streams – Texas. (a) This includes the Texas portion [of the NFRR with all tributaries] in Texas which lie west of the 100th Meridian. (b) The annual flow within this subbasin is hereby apportioned sixty percent (60%) to Texas and forty percent (40%) to Oklahoma."
>
> "Section 4.05. Special Provisions. (b) Texas shall not accept for filing, or grant a permit, for the construction of a dam to impound water solely for irrigation, flood control, soil conservation, mining and recovery of minerals, hydroelectric power, navigation, recreation and pleasure, or for any other purpose other than for domestic, municipal, and industrial water supply, on the main stem of the North Fork Red River or any of its tributaries within Texas above Lugert-Altus Reservoir until the date that imported water sufficient to meet the municipal and irrigation needs of Western Oklahoma is provided, or until January 1, 2000, whichever occurs first."

These three provisions have several consequences for Reclamation, LAID, and Lugert-Altus Reservoir.

As indicated in RRC § 4.05, Texas now has the legal authority to build reservoirs on the

[150] Arkansas, Louisiana, Oklahoma and Texas agreed to a text of the Red River Compact on May 12, 1978. The Red River Compact became effective upon adoption by the Legislatures of the four states and the approval of the United States Congress. The Oklahoma Legislature approved the Red River Compact in 1979. Okla. Stat. Tit. 82 §§ 1431-1432 (2011) (eff. May 3, 1979).

[151] For a visual understanding of the Red River Compact and the NFRR and its tributaries in Texas and Oklahoma, see the map at p. 3 in Reclamation Managing Waters (Update Sept. 2009) (showing Reach 1 and Subbasins of the Red River); Figure 18 at p. 36 of USGS Rep. 2017-5098 (map showing some Texas tributaries of the NFRR); and Ochsner Rep. at p. 3 (showing NFRR watershed).

NFRR and its tributaries (within the boundaries of the State of Texas) because January 1, 2000 is past. As indicated in RRC § 4.01, Texas can build reservoirs with storage capacity to hold sixty percent of the stream flows in the NFRR and its tributaries within Texas. Texas must let forty-percent of the stream flows on these Texas interstate streams continue flowing to Oklahoma. As indicated in RRC § 2.01, OWRB, Reclamation and LAID can "... freely administer water rights and uses in accordance with the laws of [Oklahoma], but ... subject to the availability of water in accordance with the apportionment of this Compact."

In light of the Red River Compact provisions, Lugert-Altus Reservoir is at risk of a significant loss of inflows if Texas were to build reservoirs storing Texas' sixty percent apportionment to the waters of the NFRR and its tributaries within Texas.[152] Reclamation has made known its concerns to the U.S. Army Corps of Engineers and Texas water agencies about the risk to Lugert-Altus Reservoir's water supply and LAID's water needs for its farmers.[153] But aside from expressing concerns for Lugert-Altus Reservoir, Reclamation and LAID have no legal claim to water rights that would prevent Texas from taking and using its sixty percent apportionment to the NFRR and its tributaries under the Red River Compact. From Reclamation and LAID's perspective, the good news is that Texas has not made any substantial plans, as of September 2021, for building a reservoir in Texas on the NFRR or its tributaries.

VI. TRIBAL JURISDICTION

[152] Discussion of this risk occurs in several studies of the water supply of Lugert-Altus Reservoir: Reclamation Managing Waters at p. 3 (Update Sept. 2009); Conservation Study (1995) at pp. 1 & 5.

[153] Letter to Commander, U.S. Army Corps of Engineers from Mark Terviño, Area Manager, Reclamation (January 9, 2008).

In the case of *McGirt v. Oklahoma*,[154] the Supreme Court of the United States ruled that the Creek Nation Reservation of 1866 exists today and has not been diminished or disestablished. In light of this Supreme Court decision, the Creek Nation is a sovereign over the natural resources, including water, within its reservation boundaries.

The Creek Nation is in eastern Oklahoma. The Lugert-Altus Reservoir is in western Oklahoma and is not within the boundaries of the Creek Reservation of 1866. However, the implication presented by the *McGirt* decision is that tribal reservations might continue to exist in western Oklahoma. Thus, the question for this Chapter: Does a non-diminished and non-disestablished reservation exist that encompasses the catchment basis of the Lugert-Altus Reservoir?

Lugert-Altus Reservoir itself dams the North Fork of the Red River. The North Fork of the Red River is the western boundary between the original Comanche, Kiowa and Apache Reservation in the southern reach of the river and old Greer County. The NFRR is also the southern boundary between the original Cheyenne and Arapahoe Reservation in the northern reach of the river and old Greer County.[155] By studying the relevant maps, Lugert-Altus Reservoir itself sits on the NFRR as the border with the Comanche, Kiowa and Apache original

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[154] *McGirt v. Oklahoma*, ___ U.S. ___ 140 S.Ct. 2452 (2020). *See also*, *Sharp v. Murphy*, ___ U.S. ___, 140 S.Ct. 2412 (2020) (a companion case to *McGirt*.)

[155] C. Goins & D. Goble, HISTORICAL ATLAS OF OKLAHOMA (2006) at p. 13 (major Lakes of Oklahoma), p. 129 (Map of the two Reservations), and p. 203 (Map of Southwestern Oklahoma). [hereafter Historical Atlas]. Old Greer County became part of Oklahoma Territory in 1896 due to a United States Supreme Court decision resolving a boundary dispute between the United States and the State of Texas. Prior to the Supreme Court decision, Texas governed old Greer County. *United States v. State of Texas*, 162 U.S. 1 (1896). On today's political map of Oklahoma, old Greer County forms all or part of four Oklahoma counties: Beckham, Greer, Harmon and Jackson. Historical Atlas at p. 203 (Map of Southwestern Oklahoma). Old Greer County (Texas) never had any tribal reservation within its boundaries.

reservation. Tributaries feeding into the NFRR flow from both the Comanche, Kiowa, and Apache original reservation and the Cheyenne and Arapahoe original reservation.

In the case of *Murphy v. Royal*,[156] the Tenth Circuit Court of Appeals set forth examples of congressional language that disestablished a tribal reservation. The Tenth Circuit quoted congressional language and cited a Tenth Circuit decision from 1950 as disestablishing the Comanche, Kowa and Apache Reservation.[157] Thus, it appears to this author that the Comanche, Kiowa and Apache Nations would not have jurisdiction over Lugert-Altus Reservoir itself and its tributary streams flowing from the east.

In *Ellis v. Page*,[158] the Tenth Circuit Court of Appeals faced a factual pattern identical to the *McGirt* factual pattern, except that the crime (murder) took place within the boundaries of the original Cheyenne and Arapaho Reservation. In affirming that the State of Oklahoma had criminal jurisdiction of the crime, the Tenth Circuit wrote:

> While the words of alienation employed in the treaties do not formally disestablish the reservations,[159] we think that they have the unequivocal effect of doing so. In treaty parlance they are as appropriate to disestablish the reservations as the Congressional words "vacate and restore" employed in the 1892 Act to disestablish a portion of the Colville reservation."[160]

The Tenth Circuit ruled that the original Cheyenne and Arapaho Reservation no longer exists.

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[156] 875 F.3d 896 (10th Cir. 2017). *Murphy v. Royal* became the companion case to *McGirt v. Oklahoma* at the Supreme Court under the name of *Sharp v. Murphy*.

[157] *Murphy v. Royal* at pp. 948-949.

[158] 351 F.2d 250 (10th Cir. 1965).

[159] The Tenth Circuit was referring to the Cheyenne and Arapaho Reservation and the Comanche, Kiowa and Apache Reservation.

[160] *Ellis v. Page* at p. 252.

Thus, it appears to this author that the Cheyenne and Arapaho Nations would not have jurisdiction over tributaries, flowing from the north, into the NFRR within the original boundaries of their Reservation.[161]

For several reasons, the author expresses trepidation in concluding these Reservations no longer exist: these opinions are from the Tenth Circuit Court of Appeals, not the Supreme Court of the United States; these Tenth Circuit opinions predate Supreme Court jurisprudence that has been stricter in finding disestablishment;[162] and these Tenth Circuit opinions could be overruled by the Supreme Court in light of *McGirt v. Oklahoma*. Thus, the author thinks that future litigation could arise challenging the Tenth Circuit Court opinions finding that the Comanche, Kiowa and Apache Reservation and the Cheyenne and Arapahoe Reservation were disestablished and no longer exist.

[161] For a brief discussion of the history of the Cheyenne and Arapaho Reservation, read Historical Atlas at p. 128 ("Opening of the Cheyenne and Arapaho Reservation").

[162] *See e.g., Solem v. Bartlett*, 465 U.S. 463 (1984).

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CHAPTER FIVE: UPPER WASHITA RIVER BASIN PROJECT: FORT COBB AND FOSS

I. UPPER WASHITA RIVER BASIN PROJECT: FORT COBB AND FOSS – HISTORICAL BACKGROUND INFORMATION

Although Reclamation and other Federal agencies had considered the Upper Washita River for water development projects in the 1930s,[1] Reclamation first began actual alternative plans for Reclamation projects on the Upper Washita River in a 1943 report.[2] Building upon the 1943 report, Reclamation held a Conference in Oklahoma City in September 1946 to review potential water projects on the Upper Washita River.[3] From the 1946 Conference, Reclamation recommended the authorization for construction of a reservoir at Foss and Mountain View, Oklahoma. The Conference also recommended a reservoir at Fort Cobb but deferred recommending authorization for construction until Reclamation conducted further field surveys. While Reclamation evaluated Foss Reservoir and Fort Cobb Reservoir separately, from the 1946 Conference forward Foss Reservoir and Fort Cobb Reservoir were tied together as the Upper Washita River Basin Project.[4]

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[1] The Upper Washita River is from Anadarko, Oklahoma west-northwest to the Oklahoma-Texas border in Roger Mills County, Oklahoma. The Washita River originates near Miami, Texas, but almost its entire length is in Oklahoma until the river flows into (and forms one arm of) Lake Texhoma on the Oklahoma-Texas border along the Red River. Oklahoma Comprehensive Water Plan, West Central Watershed Planning Report (ver. 1.1.2012) (hereafter OCWP West Central 2012).

[2] Bureau of Reclamation, Project Investigations Report: Survey Report on Washita River Basin Oklahoma and Texas (July 1943). The 1943 Report presented three plan alternatives with many main stem and tributary dams as options for development as set forth in Table 1 on pp. 44-45.

[3] Memorandum for Regional Engineer (Cervin), Report on Conference at Oklahoma City regarding Comprehensive Report on Washita Basin (September 9-13, 1946) (hereafter Reclamation 1946 Conference).

[4] Reclamation 1946 Conference at p. 1, Recommendations 1, 2 & 3. The Mountain View Reservoir never came into existence. Nor did other reservoirs come into existence that Reclamation recommended in the Memorandum on the 1946 Conference. Ultimately, only Foss Reservoir and Fort Cobb Reservoir moved forward as Reclamation construction projects.

By 1951, Reclamation had a Plan of Improvement for the Upper Washita River.[5] On February 9, 1951, Reclamation submitted these plans to the Oklahoma Planning and Resources Board (OPRB).[6] Responding to these plans, OPRB endorsed them and specifically stated: "We note also that your study indicates better than a 1:1.25 cost-benefit ratio for Fort Cobb, Foss and Purdy reservoirs considered together. Therefore, we recommend that these three be authorized immediately for construction."[7]

By 1953, Reclamation submitted a formal report to Congress[8] that contained the 1951 Plan of Improvement (updated) along with letters of endorsement from OPRB[9] and the Governor of the State of Oklahoma[10] for the construction of Fort Cobb Reservoir and Foss Reservoir.

In 1956, Congress passed the Washita Basin Project Act[11] authorizing Reclamation to construct and operate the Fort Cobb Reservoir and Foss Reservoir for "municipal, domestic, and industrial use, and for the irrigation … and of controlling floods … providing for the

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[5] Bureau of Reclamation, Plan of Improvement for Washita River Sub-Basin Report, Project Planning Report No. 5-13.02-2 (Sept. 1951).

[6] In 1957, the OPRB became the Oklahoma Water Resources Board (OWRB). Okla. Stat. Tit. 82 § 1073 (1959 Supp.)

[7] Letter from Clarence Burch, Chairman OPRB to H. E. Robbins, Regional Director, Reclamation (Apr. 10, 1951.) The Purdy Reservoir never came into existence.

[8] 83rd Cong., 1st Sess., House Document No. 219, A Report on a Plan of Improvement for Washita River SubBasin, Red River Basin, Okla. And Tex. (July 30, 1953).

[9] Letter from Ira Huskey, OPRB to Oscar Chapman, Sec. of Interior (Mar. 22, 1952).

[10] Letter from Ira Huskey, OPRB to Oscar Chapman, Sec. of Interior (Mar. 27, 1952). Mr. Huskey wrote this letter on behalf of the Governor of Oklahoma.

[11] Public Law 419, 70 Stat. 29, 84th Cong. (Feb. 25, 1956).

preservation and propagation of fish and wildlife, and of enhancing recreational opportunities."[12]

In 1957, Reclamation signed a contract with the Fort Cobb Reservoir Master Conservancy District (Fort Cobb RMCD) whereby Fort Cobb RMCD became obligated for the repayment of reimbursable costs of Fort Cobb Reservoir and the management and operation of the Reservoir.[13] Of particular interest for this chapter, with respect to interpreting water rights, Article 26 (1957) reads as follows:

"Water users of the District contracting for a municipal water supply shall have the prior right to use available water of the project to the maximum of 9,000 acre-feet annually, provided that no releases shall be made for irrigation use when water in storage at Fort Cobb Reservoir is less than 20,000 acre-feet."

The United States and Fort Cobb RMCD amended this 1957 contract in 1964 and 1972. In the 1964 contract, Article 5(d) was amended to read:

"Project storage is designed to yield 8,964 acre-feet of water annually for municipal and industrial use. That portion of the firm annual yield provided for anticipated future water demand is 4,840 acre-feet."[14]

In 1958, Reclamation signed a contract with Foss Reservoir Master Conservancy District (Foss RMCD) whereby Foss RMCD became obligated for the repayment of reimbursable costs

[12] *Id.* in Sec. 1 of the Act.

Section 2(c) of the Act stated: "The authorization for construction of the irrigation works … shall be limited, as to each reservoir, to a period of ten years from the commencement of the delivery of municipal water …" Irrigation works never came into existence and the limitation stated in Section 2 has long since come into effect for Fort Cobb and Foss. Thus, Fort Cobb Reservoir and Foss Reservoir do not have a Reclamation-developed irrigation project as part of their Congressional mandate.

[13] Contract between the United States and the Fort Cobb Reservoir Master Conservancy District (July 23,1957). *See especially*, Articles 5 and 8.

[14] Amendatory Contract between the United States and the Fort Cobb Reservoir Master Conservancy District, Clause 1, amending Article 5(d) (Apr. 11, 1964).

of Foss Reservoir and the management and operation of the Reservoir.[15] Of particular interest for this chapter, with respect to interpreting water rights, Article 26 (1958) has a first sentence that reads:

"Water users of the District contracting for a municipal water supply shall have the prior right to use available water of the project to a maximum of 11,800 acre-feet annually, provided that no releases shall be made for irrigation use when water in storage at Foss Reservoir is less than 45,000 acre-feet."

The United States and Foss RMCD amended this 1958 contract in 1961, 1963, 1968, and 1969. In the 1968 contract, Article 5(d) of the 1958 contract was amended to read:

"Project storage is designed to yield 11,800 acre-feet of water annually for municipal and industrial use. That portion of the firm annual yield provided for anticipated future water demand is 9,559 acre-feet."[16]

And in the 1969 Contract, Article 26 of the 1958 contract was amended to read:

"Water users of the District contracting for a municipal water supply shall have the prior right to use available water of the project to a maximum of 11,800 acre-feet annually, provided that no releases shall be made for irrigation use when water in storage at Foss Reservoir is less than 60,000 acre-feet."[17]

Also in 1958, Reclamation prepared a Definite Plan Report[18] to guide the construction and operation of the Fort Cobb and Foss Reservoirs. Reclamation began construction in 1958 and

[15] Contract between the United States and the Foss Reservoir Master Conservancy District (Feb. 14, 1958). *See especially*, Articles 5 and 8.

[16] Amendatory Contract between the United States and Foss Reservoir Master Conservancy District, Clause 2, amending Article 5(d) (July 9, 1968).

[17] Amendatory Contract between the United States and Foss Reservoir Master Conservancy District, Clause 4, amending Article 26 (Oct. 29, 1969).

[18] Bureau of Reclamation, Definite Plan Report Washita Basin Project: Serial Number 29 (Jan. 1958). (hereafter Reclamation Definite Plan 1958).

completed Fort Cobb Reservoir in 1959 and Foss Reservoir in 1961.[19] Thus, Reclamation completed both reservoirs within eleven years of submitting its Plan of Improvement to OPRB on February 9, 1951.

Once completed, both Reservoirs, as typical, contained four pools: inactive/dead pool for sediment accumulation; conservation pool as the source of water supply, flood control pool for flood control within the reservoir itself, and surcharge pool for surrounding wetlands and wildlife management areas. Fort Cobb Reservoir has a total capacity of 281,631 acre-feet divided into 1,012 acre-feet in inactive/dead pool, 70,957 acre-feet in conservation pool, 61,482 acre-feet in flood control pool, and 148,180 acre-feet in the surcharge pool.[20] Foss Reservoir has a total capacity of 871,874 acre-feet divided into 8,868 acre-feet inactive/dead pool; 159,864 in conservation pool, 180,571 acre-feet in flood control, and 522,571 in the surcharge pool.[21]

In order to assure funds with which to satisfy their repayment obligations, both Fort Cobb RMCD and Foss RMCD sought contracts with municipal and industrial users of project water – the ultimate beneficial users of project water and the intended beneficiaries of the congressionally authorized Washita Basin Project.[22] Fort Cobb RMCD has signed contracts with

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[19] Bureau of Reclamation, Water Supply Study Appraisal Report – Fort Cobb Division (October 1994) at p. 9 #6. [hereafter Water Supply Appraisal 1994]

[20] FTN Associated Ltd. (2009). Fort Cobb Reservoir 2007 Sedimentation Survey Analysis (Little Rock, AR).

[21] Ferrari, Ronald L. (2011). Foss Reservoir 2009 Sedimentation Survey available at https://www.usrb.gov/tsc/techreferences/reservoir/Foss%20Reservoir%202009%20Sedimentation%20Survey/pdf

[22] Fort Cobb RMCD and Foss RMCD hold the stream water rights granted by the State of Oklahoma within Oklahoma's prior appropriation system governing stream water. Fort Cobb RMCD and Foss RMCD have the obligation under their contracts with the United States to obtain sufficient water rights to support the project and to protect these water rights from encroachment. *See,* for example, Article 14 of the 1957 contract between the United States and Fort Cobb RMCD.

the municipalities of Anadarko and Chickasha and the industrial user Western Electric Farmers Cooperative. Foaa RMCD has signed contracts with the municipalities of Bessie, Clinton, Hobart, and New Cordell. Foss RMCD also provides water to Arapaho (Clinton), Butler (Hobart), and Frontier Development Authority (Hobart) through their member cities. (Foss RMCD has also signed a contract with the U.S. Fish & Wildlife Service for water for the Washita National Wildlife Refuge but Foss RMCD provides this water without a reimbursable charge.[23]

Turning specifically to water rights, Reclamation sent its Plan of Improvement on the Upper Washita River Basin (both Foss Reservoir and Fort Cobb Reservoir) to the OPRB on February 9, 1951. Reclamation followed up on the 1951 Plan of Improvement by filing an updated Plan of Improvement with OPRB and Congress on July 30, 1953. On those dates, Oklahoma statutes expressly allowed the withdrawal of water for appropriation by the United States. The precise statutory language was as follows:

"Whenever the proper officers of the United States, authorized by law to construct works for the utilization of waters within the State, shall notify [the Oklahoma Water Resources Board (OWRB)] that the United States intends to utilize certain specified waters, the waters so described, and unappropriated at the date of such notice, shall not be subject to further appropriation under the laws of this State, for a period of three years from the date of said notice, at which time the proper officers of the United States shall file plans for the proposed works in the office of [OWRB] for his information, and no adverse claim to the use of the waters required in connection with such plans, initiated subsequent to the date of such notice, shall be recognized

---

In light of the fact that the contract users are the ultimate beneficial users, OWRB has listed these contract users, at times and in some instances, as having a water right in their contracted amounts. The author disagrees that contract users have prior appropriation stream water rights. The author is of the opinion that contract users have contractual rights to a water supply from the Districts and only contract rights. Districts are the holders of the prior appropriation stream water rights. See discussion of these issues in Chapter 2, OKLAHOMA LAW, Conservancy Districts and Rights to Water.

[23] In his files, the author has copies of these water supply contracts as originally entered, as amended and as renewed to 2020 and beyond.

under the laws of the State, except as to such amount of water described in such notice as may be formally released in writing by an officer of the United States thereunto duly authorized: Provided, that in case of failure to file plans for the proposed work within three years, as herein required, the water specified in the notice given by the Unites States to [OWRB] shall become public water, subject to general appropriation."[24]

In 1959, the Oklahoma Legislature amended the above-quoted Section 91 to require the United States to complete its construction of Reservoirs within eight years of filing the plan of development for a reservoir.[25] The author considers the 1953 Plan of Improvement as the filing of the plan for development in accordance with the Section 91 (1951) and Section 91 as amended (1959). Reclamation completed Fort Cobb Reservoir in 1959 (six years) and Foss Reservoir in 1961 (eight years). Thus, the author concludes that Reclamation complied with the 1959 amendatory statute.[26]

During the 1950s and early 1960s, while the Washita River Basin Project went from the plan of improvement through completion of the Reservoirs, Oklahoma water law required a hydrological survey and a court adjudication before the OWRB (or its predecessors) could issue a permit granting vested rights in stream water to a water user.[27] Reclamation decided that it could proceed with construction on Fort Cobb and Foss Reservoirs prior to the hydrological

[24] Okla. Stat. Tit. 82 § 91 (1951). Section 91 was identical to Oklahoma statutes existing in 1931 and 1941.

[25] Okla. Stat. Tit. 82 § 91 (1959 Supp.). *See also*, Okla. Stat. Tit. 82 § 97 (1959 Supp.). Note that Section 97 explicitly states: "… any withdrawal notice by the United States and the filing of project plans by the United States prior to the adoption of [Section 97] shall be considered as effective and continued in full force to the maximum time allowed in [Section 91 as amended] …"

[26] Because the author concludes that Reclamation complied with Section 91 as amended in 1959, the author does not need to discuss whether the 1959 Section 91 is retroactive and would apply, in law, to the Washita River Basin Project. By complying with the 1959 Section 91, Reclamation has mooted these complicated legal questions.

[27] Okla. Stat. Tit. 82 §§ 11-14 (1961). The Supreme Court of Oklahoma interpreted these statutes in *Owens v. Snider*, 1915 OK 1012, 153 P. 833 and *Gay v. Hicks*, 1912 OK 458, 124 P. 1077.

survey and court adjudication for municipal and industrial purposes because Reclamation felt confident that adequate water rights would be forthcoming for these purposes. With respect to irrigation water rights, however, Reclamation decided that it could not build Fort Cobb and Foss irrigation projects until Oklahoma had completed an adjudication of water rights on the Washita River.[28] Hence, the Fort Cobb RMCD and the Foss RMCD water rights depended upon a future litigation in which the two Districts would be claimants.

On January 17, 1958, the Oklahoma Attorney General initiated an adjudication of water rights on the Washita River in the Caddo County District Court in Anadarko.[29] However, the Caddo County District Court dismissed this adjudication, without a final decree, on July 27, 1967.[30] The District court dismissed the Washita River litigation because, in 1963, the Oklahoma Legislature adopted a new stream water code giving OWRB the power to determine vested water rights administratively.[31] Of particular importance for the newly granted powers to OWRB are Title 82 § 5 (Paragraph 3) that reads: "The decision of the Water Resources Board shall be presumed to be correct …" and Title 82 § 6 (final Paragraph) that reads: "If no appeal is taken, the determination concerning such claims or contests of such vested rights, made by the

[28] Reclamation Definite Plan 1958 at p. 32.

[29] Reclamation Definite Plan 1958 at p. 36a. *See also*, Findings of Fact and Conclusions of Law of the Oklahoma Water Resources Board, *In the Matter of the Appeal of the Fort Cobb Reservoir Master Conservancy District from Final Order # 33*, Case No. C-69-117 (October 26, 1971) at pp.8-9. [hereafter OWRB Findings and Conclusions 1971]. This OWRB Findings and Conclusions 1971 presents a thorough history of the FORT COBB RMCD and its water right claims.

[30] OWRB Findings and Conclusions 1971 at p. 11.

[31] Okla. Stat. Tit. 82 § 1-A **Right to Use Water – Domestic Use – Priorities**; § 5 **Determination of vested rights – Aggrieved Persons – Appeal;** § 6 **Procedure for Determining Persons Possessing Vested Rights to Water** (1970 Supp). (eff. June 10, 1963).

Board pursuant to this Section [6], shall be conclusive and no action concerning those matters covered by the determination of the Board shall be brought at any time thereafter."[32]

In June 1968, OWRB exercised its authority under Sections 5 and 6 of the 1963 stream water code to initiate an administrative proceeding to determine the vested stream water rights on the Washita River.[33] Fort Cobb RMCD filed its water right claim on August 23, 1968 and FOSS RMCD filed its water right claim on July 25, 1968. OWRB rendered its order establishing stream water rights on the Washita River in Final Order # 33 (August 12, 1969). Most relevant, Final Order # 33 read as follows:

"5-1. Fort Cobb Reservoir Master Conservancy District …
Priority: 02-09-1951 (51-128) Feb. 9, 1951, based on filing of project plans by the United States.
Purpose: Municipal, Industrial, Fish and Wildlife, Recreation and Irrigation.
Location: …
Amount: 14,834 ac. ft. ann. For use & evap. The remainder of yield of Conserv. Stor. Cap. of Reserv. will have approp. prior. of 8-23-68. App. No. 68-332.
Source: Fort Cobb Reservoir, Pond (Cobb) Creek, Surface area 4,098 acres, storage capacity 80,087 acre-feet.
…"

"5-2. Foss Reservoir Master Conservancy District …
Priority: 02-09-1951 (51-127) Feb. 9, 1951 based on filing of project plans by the United States.
Purpose: Municipal, Industrial, Fish and Wildlife, Recreation and Irrigation.
Location: …
Amount: 30,000 ac. ft. ann. To replace Evap. Loss. The remainder of Yield of the Conserv. Stor. Cap. of Reserv. will have approp. prior. 7/25/68. App 68-296.
Source: Foss Reservoir, Washita River, Surface Area 8,800 acres, storage capacity 256,223 acre-feet.
…"

[32] The Legislature repealed Okla. Stat. Tit. 82 §§ 5 & 6 (1970 Supp.) in 1972 and replaced them with Okla. Stat. Tit. 82 §§ 105.6-105.8. (1980 Supp.) Laws 1972, ch. 256.

[33] OWRB Findings and Conclusions 1971 at p. 11

Both Fort Cobb RMCD and Foss RMCD objected to the bifurcated priority that OWRB assigned to their water rights in Final Order # 33. Using Okla. Stat. Tit. 82 § 5, both Fort Cobb RMCD and Foss RMCD appealed OWRB's priority date determination. In 1974, the Supreme Court of Oklahoma decided the appeals in favor of Foss RMCD and Fort Cobb RMCD. Specifically, the Supreme Court of Oklahoma wrote:

"The sole issue to be determined on appeal is the establishment of the proper appropriative priority date of the Foss Master Conservancy District.

"The Foss Master Conservancy District (District), through the United States of America, claims a priority date of February 9, 1951, for 66,900 acre-feet of the Washita River Stream System. This claim was denied by the Oklahoma Water Resources Board (Board). On August 12, 1969, the Board issued an order which determined the vested service rights in the Washita River System. The District was given 30,000 acre-feet as a vested right with a priority date of February 9, 1951 and a permit of 36,900 acre-feet with appropriative priority of July 25, 1968.

"…

"On appeal the District Court [of Custer County] modified the order of the Board and established the priority for the vested rights in surface waters in the United States and the District in the amount of 66,900 acre-feet as of February 9, 1951. The [Board's] order was affirmed in all other respect.

"…

"The Oklahoma Planning and Resources Board, the Oklahoma Water Resources Board, and the governor of the State of Oklahoma, recognized the validity of the appropriation by the federal government. The Attorney General rendered an opinion [October 8, 1962] to the same effect. It was only after eighteen years that a contra position was asserted.

"The purpose of the statute was to give notice to the state of the intention of the federal government to utilize certain waters. The stipulated facts make it readily apparent that not only was notice acknowledged, it was enthusiastically heralded. We find that there was substantial compliance with the statute. The evidence shows that the purpose of the statute was served. …

"Affirmed."[34]

On the same day as the Supreme Court issued the Foss RMCD opinion, just now quoted at length, the Supreme Court rendered judgment for Fort Cobb RMCD stating as follows:

"The Fort Cobb Conservancy District (District), through the United States of America,

[34] *Oklahoma Water Resources Board v. Foss Reservoir Master Conservancy District*, 1974 OK 113, 527 P.2d 162. The Oklahoma Supreme Court also wrote, "… The hydrographic survey is not necessary to the establishing dates of priority. …"

claims a priority date of February 9, 1951 for 29,400 acre-feet of the Washita River Stream System. This claim was denied … The District was given 14,834 acre-feet as a vested right with a priority date of February 9, 1951 and a permit of 14,566 acre-feet with appropriative priority of August 23, 1968.

"…

"The District Court [of Caddo County] on appeal modified the order of the Board and established the priority for the vested rights … in the amount of 29,400 acre-feet as of February 9, 1951. The [Board's] order was affirmed in all other respects.

"…

"It would be both unconscionable and impractical to deny the 1951 priority to the District after it had been repeatedly recognized by the Board's predecessors, and after the United States had expended millions of dollars on the project with the apparent cooperation of the State of Oklahoma.

"Affirmed."[35]

As will be further explored and discussed in Part II of this Chapter, even before the Supreme Court of Oklahoma decided the two cases from which the author has just extensively quoted, OWRB and the Foss RMCD and Fort Cobb RMCD were in dispute about how to handle evaporation from the Reservoirs, the amount of the firm yield of the Reservoirs, and whether the Reservoirs held additional waters that could be made available through regular permits to other users. Yet, whatever disputes between OWRB and the Districts remained about the size of the water rights, the Supreme Court of Oklahoma explicitly had resolved the priority date for whatever water rights Foss RMCD and Fort Cobb RMCD hold – February 9, 1951, when Reclamation gave notice of the Washita River Basin Project by filing a Plan of Improvement with the State of Oklahoma.

II. DEFINING THE STREAM WATER RIGHTS OF FORT COBB RESERVOIR MASTER CONSERVANCY DISTRICT AND FOSS RESERVOIR MASTER CONSERVANCY DISTRICT

[35] *Oklahoma Water Resources Board v. Fort Cobb Reservoir Master Conservancy District*, No. 45982 Unpublished Opinion (Oct. 1, 1974). The author has this unpublished opinion in his files.

a. Fort Cobb RMCD and Foss RMCD water rights under OWRB permits.

Fort Cobb RMCD and OWRB Permits

In the late 1960s, as OWRB worked towards determining vested water rights on the Washita River, Reclamation placed a memorandum in its files explaining Fort Cobb RMCD's water right claim in the vested right proceedings.[36] Reclamation wrote:

> "The District filed its application in August of 1968, for 29,400 acre-feet per year, claiming a priority of February 9, 1951.
> "The amount, 29,400 acre-feet per year, was derived by taking the firm yield of 13,300 acre-feet per year, for the period 1926-1963. And adding the evaporation for the maximum year of evaporation, 16,100 acre-feet per year. The State has modified its position on evaporation and is now allowing it to be included with the actual use."

OWRB issued its Final Order # 33, determining vested stream water rights on the Washita River, on August 12, 1969 giving Fort Cobb RMCD Priority 5-1 in the following amount: "14,834 ac. ft. ann. For use & evap. The remainder of yield of Conserv. Stor. Cap. of Reserv. will have approp. prior. of 8-23-68. App. No. 68-322." This OWRB amount seems unclear about how OWRB handled evaporation. Moreover, this OWRB amount does not provide an explicit quantity for the reservoir yield.[37]

After OWRB issued Final Order # 33, OWRB continued to work on a permit for Fort Cobb RMCD for its Application No. 68-322. On April 13, 1971, the OWRB Governing Board met to vote on Fort Cobb RMCD App. No. 68-322 and voted to grant Fort Cobb RMCD a permit stating: "in the amount of 14,566 acre-feet with a priority date of August 23, 1968. This,

[36] Memorandum from Area Engineer (Flaigg) to Reclamation Office Files (Jan. 22, 1969)

[37] Reclamation contested the vested right 5-1 amount and stated that 29,400 acre- feet is the correct amount. Letter from Norman Flaigg. Reclamation Area Engineer to Forest Nelson, Ex. Dir. OWRB (May 6, 1969) (objection to OWRB's tentative order).

together with their vested right [14,834 ac. ft. from Final Order # 33 Priority 5-1], gives the Fort Cobb RMCD the total yield [29,400 ac. ft.] of the reservoir." Taking into account Fort Cobb RMDC's vested water right and permit right, the Governing Board concluded that no water existed for other stream water claimants above Fort Cobb Reservoir. Consequently, the Governing Board voted to deny several applications for stream water from Cobb Creek and its tributaries above Fort Cobb Reservoir, while noting that these applicants could contract to purchase surplus reservoir water from Fort Cobb RMCD.[38]

In light of the Governing Board's April 13, 1971 actions, OWRB issued Permit P68-332 to Fort Cobb RMCD for 29,400 acre-feet with a schedule of use: "approximately 50 percent by 1980; approximately 75 percent by 2000; approximately 100 percent by Life of the Project."[39]

The author interprets the Governing Board's actions of April 13, 1971 and OWRB Permit P68-332 as recognizing evaporation as a component of Fort Cobb RMCD's water right and as determining the yield of the reservoir as 29,400 acre-feet per year. By this permit, the Governing

[38] The data for this paragraph comes from Official Minutes, Oklahoma Water Resources Board (April 13, 1971) at pp. 7-9.

Regarding sales of water from the Fort Cobb Reservoir, Letter from Guy Keith, Chairman, OWRB to Billie Bryan, President Fort Cobb RMCD (May 26, 1971) stating: "[OWRB] hereby requires the delivery of such surplus water at reasonable rates in the amounts requested, but not to exceed 4,340 acre-feet to the parties [irrigators with stream water permits on the main stem Washita River downstream from Fort Cobb Reservoir] and to such other irrigators holding valid permits and who agree to the necessary terms of reimbursement."

Thereafter, Fort Cobb RMCD received an inquiry to purchase stored water from irrigators below the Reservoir seeking to have Fort Cobb RMCD release water into Cobb Creek and onto the Washita River for downstream retrieval. Letter from J.A. Bradley, Reg. Dir. Reclamation to Hubert Miser, Chairman, Washita Irrigators, Inc. (August 4, 1972).

[39] Letter from Alan Haws, Chief Eng. OWRB to J.B. Miles, President Fort Cobb RMCD (April 12, 1973) (forwarding OWRB Permit P68-332, dated April 13, 1971.) Okla. Stat. Tit. 82 § 32 (1971) requires a schedule of use when "the total amount of the water to be authorized by the permit cannot put to beneficial use within seven (7) years, …"

Board had clarified and quantified the ambiguities of the Fort Cobb RMCD Priority 5-1 vested right in Final Order # 33. Moreover, the Governing Board's April 13, 1971 action explains where the Supreme Court of Oklahoma, in 1974, got the figure of 29,400 acre-feet as the Fort Cobb RMCD water right that the Supreme Court ruled had a priority date of February 9, 1951.[40]

On September 28, 1979, OWRB informed Fort Cobb RMCD that Fort Cobb RMCD had failed to use the amount of water authorized under its Permit P68-332 and that OWRB would conduct a hearing on November 29, 1979 to take evidence and hear arguments about reducing Fort Cobb RMCD's stream water right from 29,400 acre-feet to 9,297 acre-feet.[41] OWRB relied upon Okla. Stat. Tit. 82 §§ 105.15 through 105.18 (1980 Supp.) especially § 105.17 **Reversion of water to public** which says, in part:

"… When the party entitled to the use of water commences using water but thereafter fails to beneficially use all or any part of the water claimed by him, for which a right of use has been vested for the purpose for which it was appropriated for a period of seven (7) continuous years, such unused water shall revert to the public and shall be regarded as unappropriated public water."

This September 28, 1979 OWRB notice set off four years of hearings, letters, and meetings between OWRB, Fort Cobb RMCD and Reclamation raising many contentious issues among which the author focuses on: the handling of evaporation,[42] the firm yield of the Fort

[40] *Oklahoma Water Resources Board v. Fort Cobb Reservoir Master Conservancy District*, No. 45982 Unpublished Opinion (Oct. 1, 1974). The author has this unpublished opinion in his files.

[41] OWRB Notice of Hearing to Reduce Stream Water Rights (September 28, 1979).

[42] *See e.g.,* Draft Letter from James Barnett, Exec. Dir. OWRB to Harold Broadbent, Commissioner of Reclamation (n.d. but context seems to be 1982). Mr. Barnett wrote: "The annual yield of the reservoir erroneously stated and described in the original Fort Cobb Master Conservancy District vested water right as 29,000 a.f. is actually established at 13,300 a.f. The larger figure (29,000 a.f.) erroneously includes an average of 19,046 a.f. lost annually to evaporation, and inclusion and tolerance of such error would seem to legitimize evaporation as a beneficial use of water." *Id.* at p. 2.

Cobb Reservoir,[43] the amount of water factually used from the Reservoir,[44] and the availability of stored water for appropriation by users other than Fort Cobb RMCD's municipal and industrial users (Anadarko, Chickasha, and Western Farmers Electrical Cooperative).[45]

OWRB, Fort Cobb RMCD and Reclamation ultimately resolved their dispute with the issuance of an agreed[46] upon OWRB Final Order on June 14, 1983 that did the following:

"RESPONDENT'S WATER RIGHT AND ACTUAL WATER USE

"15. … the Board finds and determines that Respondent's water right (by Vested Right and/or by Permit) is for the total appropriable "yield" of the reservoir. The Board further finds

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[43] *See e.g.,* Memorandum from Reclamation Regional Planning Officer to Planning Officer, Reclamation OKC (March 28, 1979). The memorandum says that the annual firm yield for Fort Cobb Reservoir is 13,300 acre-feet allowing for 100-year life of the Reservoir (2060) with 100-year sediment volume, but that a firm-yield study projected for 1985 is 18,000 acre-feet. Handwritten on the memorandum is the comment: "We – Bureau – very inconsistent in yield presentations." *See also,* Letter from W. M. Colvin, Acting Regional Supervisor Reclamation to James Barnett, Exec. Dir. OWRB (Dec. 31, 1979) sending a firm yield report, prepared in response to the November 1979 hearing, showing a firm yield of 18,000 acre-feet per year "not including evaporation."

[44] Although OWRB and Fort Cobb RMCD/Reclamation presented conflicting data about water usage, the Hearing Officer ultimately presented a table of use, for the seven-year period in contention (1971-1977), showing that Fort C0bb RMCD used 10,388 acre-feet in 1977 as its highest usage and that average evaporation during those seven years was 19,046 acre-feet per year. OWRB, Final Order, In the Matter of the Stream Water Vested Right of Fort Cobb Master Conservancy District (June 14, 1983) at p. 4. [hereafter OWRB Final Order Fort Cobb RMCD June 14, 1983]

[45] *See e.g.,* Daily Oklahoman, Board Delays Water Order – U.S., State at Odds in Fort Cobb Lake Flap (May 14, 1980). The final paragraph of the newspaper article reads: "Complicating the issue further is a position taken by the newly organized Washita Irrigation District One. The irrigation district seeks rights to water for irrigation along the Washita River below the reservoir when a surplus is available."

[46] For example, the following documents:
Letter of James Barnett, Exec. Dir. OWRB to Robert Weimer, Regional Director Reclamation (October 6, 1980) that says on page 3: "… I wish to advise that Board staff has completed a hydrologic survey and investigation … and it has been determined that this yield is 18,000 a.f. annually. …"
Letter of Jerry Loula, Superintendent Fort Cobb RMCD to Robert Weimer, Regional Director Reclamation (Nov. 19, 1980) setting forth a Fort Cobb RMCD Resolution accepting a "vested water right in the amount of 18,000 acre-feet exclusive of unavoidable evaporation."
Letter of Eugene Hinds, Regional Director Reclamation to Quinton Opitz, Superintendent Fort Cobb RMCD (April 19, 1983) stating "Enclosed is a copy of the [OWRB's] proposed "Findings of Fact, Conclusions of Law, and Board Order" revised April 12, 1983 …
"… It appears that most of those concerns have been favorably accommodated in the revised Findings, Conclusions, and Order. This revision appears acceptable to the Bureau of Reclamation."

… that the computed total appropriable yield of Ft. Cobb Reservoir is 18,000 a.f. annually. …

"In connection with this finding, the Board assures all interested parties that the total appropriable yield as stated above is the total reservoir supply deemed available for appropriation purposes and that accordingly, no additional permits other than those authorized pursuant to 82 O.S. 1981 Sections 105.13 **[Seasonal, temporary and term permits]** and 105.21**[Surplus Water]** would or could be issued … so long as Respondent places the water to actual beneficial use as required by law and the terms and provisions of the subject regular permit. (at p. 4)

"16. Board further finds and determines … Respondent's schedule-of-use … based upon the year 2060 as "Life of the Project" and exclusive of (Reservoir) water losses due to evaporation, would be as follows: 9,000 a.f. (50%) by 1980; 13,500 a.f. (75%) by 2000; 15,000 a.f. (83 1/3%) by 2020; 16,500 a.f. (91 2/3%) by 2040; 18,000 a.f. (100%) by 2060." (at p. 4)

"CONCLUSIONS OF LAW

"6. That upon due consideration of the issues and holding in the case of *Oklahoma Water Resources Board v. Fort Cobb Reservoir Master Conservancy District*, Oklahoma Supreme Court Case No. 45,982 (unpublished Opinion filed October 1, 1974), the Board finds and determines as a matter of law and fact that said holding and decision related solely and exclusively to the legal issue of the establishment of the proper appropriative priority date of Respondent's water right under Board's earlier Final Order No. 33 …" (at p. 5)

"…

"10. … Respondent is currently in compliance with projected water use schedules provided with Permit No. 68-332; and that for cause shown, Respondent's water right should not be administratively declared to have been lost, in whole or in part, for non-use … Based upon this finding and determination, Board finds it unnecessary to specifically address other matters of defense, objection and cause asserted by Respondent in these proceedings. Such other matters are deemed moot in light of the findings, conclusion and Order herein made." (at p. 6)

In light of the Final Order of June 14, 1983, OWRB issued an amended vested stream water right to Fort Cobb RMCD that reads as follows:

"Priority: 2-9-51 (51-128) Based on filing of project plans by the United States. Vested Right Order dated Aug. 12, 1969, and Supreme Court Order 45,982;

"Purpose: Municipal, Industrial, Fish & Wildlife, Recreation & Irrigation

"Amount: 18,000 Acre-Feet/Year

"…[47]

[47] Letter from James Barnett to Fort Cobb RMCD (August 23, 1983) (forwarding Permit 51-128, 6-14-83.) Permit 51-128 is the current steam water permit of Fort Cobb RMCD.

Permit 51-128 is the current stream water permit of FORT COBB RMCD.

Foss RMCD and OWRB Permits

Foss RMCD and OWRB Permits, not surprisingly, has a parallel history to Fort Cobb RMCD and OWRB Permits.

OWRB issued its Final Order # 33, determining vested stream water rights on the Washita River, on August 12, 1969 giving Foss RMCD Priority 5-2 in the following amount: "30,000 ac. ft. ann. To replace Evap. Loss. The remainder of Yield of the Conserv. Stor. Cap. Of Reserv. will have appropr. prior. 7/25/68. App. 68-296." This OWRB amount seems unclear about how OWRB handled evaporation. Moreover, this OWRB amount does not provide an explicit quantity for the reservoir yield.

While the priority-date litigation proceeded through the courts,[48] OWRB continued to work on a permit for Foss RMCD for its Application No. 68-296. On August 17, 1971, OWRB issued a permit to Foss RMCD granting "a permit to appropriate 36,900 acre-feet of water per calendar year … This permit is in addition to vested rights of 30,000 acre-feet for a combined total of 66,900 acre-feet, but in no case less than the yield of the reservoir."[49] Permit 68-296 also set forth a schedule of use as follows: "Approximately 25% by 1980; approximately 50% by 2000; approximately 75% by 2020; approximately 100% by 2040." In addition, on an explanatory sheet attached to Permit 68-296, OWRB described the permit as follows:

"V[ested] R[ight] priority based on filing of plans, no withdrawal. No use before 6/10/1963 so V.R. is based on annual evap. loss as shown by Bureau letter of 12/11/68 (our figures: 40" or 3'4" x 8,800 acres = 29,920 a.f. loss.) Filed app. No. 68-296, July 25, 1968

[48] *Oklahoma Water Resources Board v. Foss Reservoir Master Conservancy District*, 1974 OK 113, 527 P.2d 162.

[49] OWRB Permit P68-296 (Aug. 17, 1971)

which will be processed for permit."

Reading Permit 68-296 closely, OWRB gave a vested right in Final Order # 33 for 30,000 acre-feet matching closely the calculated evaporation from Foss Lake. OWRB then gave a prior appropriation for 36,900 acre-feet for the purposes of municipal, industrial, fish and wildlife, recreation and irrigation. The author interprets Foss RMCD Permit 68-296 as recognizing evaporation as a component of Foss RMCD's water right and as determining the yield of the reservoir as 36,900 acre-feet for the purposes listed. Thus, this permit clarified and quantified the ambiguities of Foss RMCD Priority 5-2 vested right in Final Order # 33. Moreover, Permit 68-296 explains where the Supreme Court of Oklahoma, in 1974, got the total figure of 66,900 acre-feet as the Foss RMCD water right that the Supreme Court ruled had a priority date of February 9, 1951.[50]

By the early 1980s, OWRB had decided that evaporation should not be considered a component of a water right[51] and OWRB intended to undertake a review of Foss RMCD's usage of water to determine if Foss RMCD had lost all or a part of its water right for continuous non-use.[52]

OWRB's decision to revise Foss RMCD's water right -- to remove evaporation and to determine actual usage -- set off several years of meetings and correspondence about OWRB's

[50] *Oklahoma Water Resources Board v. Foss Reservoir Master Conservancy District*, 527 P.2d 162 (Okla. 1974).

[51] *See e.g.,* Draft Letter from James Barnett, Exec. Dir. OWRB to Harold Broadbent, Commissioner, Reclamation (no date but context seems to be 1982). Although the letter directly related to Fort Cobb RMCD, it is clear from all correspondence that OWRB also had decided, as a matter of policy, that evaporation should not be part of Foss RMCD's water right.

[52] Letter from James Barnett, Exec. Dir. OWRB to Charles Engleman, President Foss RMCD (August 30,1983). *See*, Okla. Stat. Tit. 82 § 105.17 **Reversion of water to public** (1980 Supp.).

proposed reduction of Foss RMCD's water right from 66,900 acre-feet per year to 2,000 acre-feet per year.[53] In these meetings and in the correspondence, Reclamation and OWRB ultimately agreed to a firm yield of Foss Reservoir as 18,000 acre-feet per year[54] and to counting water used for dilution of effluent from Foss' water treatment plant as a beneficial use.[55]

OWRB, Foss RMCD and Reclamation resolved their dispute with the issuance of an agreed upon OWRB Permit P51-127 of August 7, 1985 that stated the following:

"… The appropriation as amended is in the total amount of 18,000 acre-feet of water per calendar year for the purpose(s) of … municipal, industrial, recreation, fish, wildlife and irrigation … Schedule of Use: 1994 - 47% = 8,460 a.f; 2005 – 58% = 10,440 a.f.; 2015 – 69% =12,420 a.f.; 2025 – 80% = 14,400 a.f.; 2040 – 100% = 18,000 a.f."

Since OWRB issued Permit P51-127 on August 7, 1985, OWRB, Foss RMCD and Reclamation have agreed to three amendments[56] to the water right. The current Foss RMCD permit is from February 2, 1996 that reads:

"Amount Authorized per Calendar Year 17,634 acre-feet;[57]

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[53] Memorandum from Regional Supervisor (Calhoun) to Regional Director Reclamation (Mar. 24, 1982) stating that OWRB took the following position: "Foss: OWRB shows maximum annual use of water around 2,000 acre-feet per year; therefore, that is the water right."

[54] Letter from Eugene Hinds, Reg. Dir. Reclamation to James Barnett, Exec. Dir. OWRB (Mar. 9, 1984). (forwarding study showing firm yield of 18,000 acre-feet per year). Letter from James Barnett, Exec. Dir. OWRB to Charles Engleman, President Foss RMCD (April 20, 1984) (accepting Reclamation's determination of firm yield as 18,000 acre-feet per year).

Reclamation also attached to the Hind's March 9, 1984 letter a chart about Foss RMCD's usage of water delivered to its treatment plant and for effluent dilution and a column showing average evaporation of 26,969.36 acre-feet per year from 1970 through 1983.

[55] Letter from Eugene Hinds, Reg. Dir. Reclamation to James Barnett, Exec. Dir. OWRB (Dec 23, 1983). Memo from J.A. Wood, Stream Water Div. Chief to James Barnett, Exec. Dir. OWRB (Mar. 27, 1983) (showing OWRB's calculation that in 1976 Foss RMCD used 1,701.43 a.f at the water treatment plant and 2,245.25 a.f. for dilution of the treatment plant effluent).

[56] OWRB amended Permit 51-127 (October 9, 1990); OWRB amended Permit 51-127 (Feb. 11, 1992); and OWRB amended Permit 51-127 (Feb. 2, 1996).

[57] From the documents that the author has read, the documents do not explain why the Foss RMCD permit decreased from 18,000 a.f./yr. in the 1992 permit to 17,634 a.f./yr. in the 1996 permit – a decrease of 364 a.f/yr.

Purpose(s) municipal, industrial, recreation, fish, wildlife and irrigation.
…
Schedule of Use: Year 2000 41% 7,230 [with increments every ten years] until Year 2060 100% 17,634."

Author's comments

In light of this presentation of the Fort Cobb RMCD and Foss RMCD water permits from OWRB, the author makes the following comments about the legal implications of this history and decisions.

Comment One. Although the author has not thoroughly researched (nor would doing thorough research definitively resolve) the legal issue, the author is of the opinion that OWRB Final Order (June 14, 1983) and OWRB Permit 51-127 (August 17, 1985) are the present definitive, controlling law about the stream water rights of Fort Cobb RMCD and Foss RMCD, respectively. In other words, the author holds the opinion that by negotiating and agreeing to Final Order (June 14, 1983) and Permit 51-127 and by not appealing the Final Order and the Permit, Fort Cobb RMCD, Foss RMCD and Reclamation have bound themselves to these OWRB decisions. Consequently, except for the priority date of February 9, 1951, the author concludes that OWRB Final Order (June 14, 1983) and Permit 51-127 supersede the Supreme Court opinions of October 1, 1974. Fort Cobb RMCD has a stream water right of 18,000 a.f./yr; Foss RMCD has a stream water right of 18,000 a.f./yr.

Comment Two. OWRB has determined that the firm yield of both reservoirs is 18,000 acre-feet per year "exclusive of unavoidable reservoir evaporation losses."[58] In other words,

[58] OWRB Final Order FCMCD June 14, 1982 at p. 6 # 8.

OWRB no longer allows Reservoir claimants to include evaporation in their stream water appropriation.[59] But the fact that OWRB had adopted this legal approach to evaporation does not mean that OWRB can ignore evaporation in the issuance and enforcement of stream water rights. To this author's mind, there are two ways to handle evaporation loss, particularly an evaporation loss characterized as "unavoidable."

First, OWRB could revert to its position of the late 1960s that evaporation can be included in the water right as a form of actual use.[60] At that time, OWRB may have considered evaporation as includable within the water right because a reservoir is a diversion point of the water. A water-right holder has a water right to the amount actually used and to the amount of water for a reasonably efficient carriage of that water from the diversion point to the water-right holder's fields, municipal water plant, or industrial plant. If the reservoir, by storing the water, is reasonably efficient in carrying the water until the reservoir releases the water for the ultimate beneficial users of the water, then the reservoir could claim evaporation as part of its water right for actual use.[61] As OWRB has characterized the evaporation loss as "unavoidable," it would appear that Fort Cobb RMCD and Foss RMCD are being reasonably efficient in their storage of the water for delivery. And, it appears that OWRB has determined that the unavoidable reservoir

[59] Letter of James Barnett, Exec. Dir. OWRB to Robert Weimer, Regional Director Reclamation (July 16, 1981) wherein Mr. Barnett writes: "… I believe our only point of difference was one of procedure on how to administratively acknowledge, treat and record the matter of evaporation loss from the reservoir. Our mutual acknowledgment that even though the evaporation loss from the reservoir must be duly accounted for, it should not be considered as part of the 18,000 acre-feet authorized for actual use and appropriation, would appear to effectively resolve any further problems respecting the procedural treatment of evaporation losses."

[60] Memorandum from Area Engineer (Flaigg) to Reclamation Office Files (Jan. 22, 1969).

[61] D. Getches, WATER LAW IN A NUTSHELL (4th ed. 2009) at pp. 129-137.

evaporation loss for Fort Cobb RMCD is 19,049 acre-feet per year[62] and for Foss RMCD is 29,920 acre-feet per year.[63]

By the late 1970s, OWRB worried that including the evaporation loss as a component of the water right would mask how much water was actually used, would mask how much water was available for other applicants for water on the Washita River, and would make it more difficult for OWRB to determine whether the Districts complied with their schedules of use. Apparently, these concerns prompted OWRB to change its position on evaporation and to initiate the redeterminations as to whether the Districts had lost some amount of their water right for non-use.[64]

Ultimately, OWRB, the two Districts and Reclamation agreed to not directly account for evaporation as part of the permitted water right. Yet everyone recognized that evaporation must be taken into account somehow in accurately understanding a water right permit for a reservoir.

Second, OWRB can account for evaporation as it determines whether unappropriated water exists for future applicants for water rights[65] and as it acts to protect water rights from interference by junior water-right holders. The author will more fully discuss this "interference" approach to accounting for evaporation in Part III(a) of this chapter.

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[62] OWRB Final Order Fort Cobb RMCD June 14, 1983 at p. 4

[63] Explanatory sheet attached to OWRB Permit 68-296 (Aug. 17, 1971).

[64] *See e.g.,* Draft Letter from James Barnett, Exec. Dir. OWRB to Harold Broadbent, Commissioner of Reclamation (no date but context seems to be 1982); Letter from James Barnett, Exec. Dir. OWRB to Charles Engleman, President Foss RMCD (Aug. 30, 1983).

[65] OWRB Final Order Fort Cobb RMCD June 14, 1983 # 15 at p. 4. (OWRB determined that no other regular permits would or could be issued above Fort Cobb Reservoir.)

Comment Three. OWRB, the Districts, and Reclamation are in agreement that the Districts' water right is for the total appropriable yield of the reservoir.[66] The total appropriable yield is better known as "firm yield" defined as: "Our definition of firm yield is the amount of water that can be withdrawn from the reservoir each year including the years of most critical drought of record under the conditions of flow and reservoir sedimentation assumed for the study."[67]

By assuring that the Districts have a water right to the firm yield, the Districts presume that the reservoirs should have sufficient water to fulfill their contractual obligations to their municipal and industrial and irrigation (if applicable)[68] users of the water. And by having sufficient water to deliver, the Districts should have a continuing stream of payments from the municipal and industrial users needed to repay the reimbursable construction costs owed to the United States and to pay the operation and maintenance costs that occur from year-to-year. At the same time, the firm yield, as defined to assure water even in years of the most critical drought, is clearly an amount of water in storage that is much less than the capacity of the Reservoir. In other words, the firm yield of a reservoir is an amount of water that guarantees the economic feasibility of the Reclamation project and the functional operation of the Reservoir for its ultimate beneficial users.

By granting the Districts a firm yield water right (coincidentally 18,000 acre-feet per year

[66] *See e.g.,* OWRB Final Order Fort Cobb RMCD June 14, 1983 # 15 at p. 4

[67] *See e.g.,* Letter from Robert Weimer, Reg. Dir. Reclamation to James Barnett, Exec. Dir. OWRB (Dec. 5, 1980) at pp. 1-2. Both Reclamation and OWRB have used this definition of firm yield in many documents.

[68] Neither the Fort Cobb RMCD nor the Foss RMCD have Reclamation irrigation projects, although Congress initially authorized irrigation projects for the two Districts. *See*, fn. 12 of this chapter and accompanying text.

each), Fort Cobb RMCD and Foss RMCD have a quantified amount of water that they can market to potential customers within the Congressional authorized purposes for the projects. Fort Cobb RMCD and Foss RMCD each have 18,000 acre-feet per year as their vested water right with a priority of February 9, 1951. OWRB cannot diminish or take away that water right unless Fort Cobb RMCD and Foss RMCD do not use that 18,000 acre-feet in accordance with the OWRB prescribed schedules of use. Implicitly, OWRB is acknowledging that that firm yield of 18,000 acre-feet per year per Reservoir is no longer available in the Washita River and its tributaries for appropriation by any other applicant who desires to use waters of the Washita River system.

Comment Four. With the Districts secure in their firm yield water right of 18,000 acre-feet per year (also taking into account, somehow, the unavoidable evaporation from the reservoir lakes), the author believes that the water in storage above that firm yield amount is the "storage right" of the Reservoir.[69] The Districts store this water for the maximum beneficial use of water on the Washita River stream system. The Districts store this water as a trustee for other prior appropriators who apply to use the surplus water for beneficial purposes within Oklahoma's prior-appropriation stream water law.

OWRB can grant a permit to applicants for an amount within the quantity of water stored in the reservoirs.[70] For these permits from storage water, OWRB is required to put a condition on the permit that the applicant enter into a repayment contract with the District within two years

[69] *See,* Okla. Admin. Code § 785:20-1-9 (2014).

[70] *See,* Okla. Admin. Code § 785:20-5-5(b)(1) (2014).

of the issuance of the permit.[71] In the author's opinion, OWRB also may consider putting a condition into a surplus water permit that clearly specifies how and when the surplus water permit ends so as to protect the Districts' firm yield senior water right of 18,000 acre-feet per year. Even if OWRB does not add the author's suggested condition, the Districts assuredly will add a clause to the mandatory contract between the District and the surplus water user indicating when the District is entitled to end surplus water delivery -- in order to protect its firm yield water right and to protect its contractual users of the District's firm yield water.[72]

b. Top of the Conservation Pool

For the Washita Basin Project, Reclamation invoked the Oklahoma statute,[73] allowing federal withdrawal of stream water for Reclamation projects, by submitting a Plan of Improvement on February 9, 1951.[74] This Plan of Improvement established the priority date for the water rights of both Fort Cobb RMCD and Foss RMCD. However, the Plan of Improvement did not identify any specified amounts of water for the Washita Basin Projects. Rather, Reclamation clarified somewhat the amount of water needed for Fort Cobb RMCD and Foss

[71] Okla. Admin. Code § 785:20-7-5 (2014). *See also*, Okla. Stat. Tit. 82 § 105.21 **Surplus water** (2011) that states, "… shall be required to deliver such surplus, at reasonable rates for storage or carriage, or both, as the case may be, to the parties entitled to the use of the water for beneficial purposes. …"

[72] Recall that the Districts have such a clause in their present contracts with Reclamation that gives priority to municipal and industrial contract users and obligates the Districts to cease delivery to irrigation when the water in storage is less than a specified acre-feet amount. Contract between the United States and Fort Cobb RMCD (July 13, 1957), Article 26; Contract between the United States and Foss RMCD (Feb. 14, 1958), Article 26.

[73] Okla. Stat. Tit. 82 § 91 (1951).

[74] For the Washita Basin Project, there never was a formal letter of withdrawal from Reclamation to the State of Oklahoma. No letter specifying specific waters of the Washita River exists. Explanatory sheet attached to OWRB Permit 68-296 (Aug. 17, 1971).

RMCD through the Congressional Act[75] authorizing the projects and the Definite Plan Report written in 1958 to guide construction of the two reservoirs.[76] Indeed, Reclamation did not clearly identify the specified waters being withdrawn from the Washita River until Reclamation assisted Fort Cobb RMCD and Foss RMCD to file their applications for vested water rights in 1968. For Fort Cobb RMCD, Reclamation sought 29,400 acre-feet; for Foss RMCD, Reclamation sough 66,900 acre-feet.[77] By contrast, the Fort Cobb Reservoir has an inactive/dead pool plus conservation pool capacity of 71,969 acre-feet; Foss Reservoir has an inactive/dead pool plus conservation pool capacity of 168,732 acre-feet. From the facts in this paragraph, the author draws the following legal conclusions.

First, Fort Cobb RMCD and Foss RMCD have a storage right in surplus water equating to the difference between the amount claimed in the water right and the usable water in the inactive/dead pool plus the conservation pool. Thus, Fort Cobb RMCD has a storage right in 42,569 acre-feet (i.e., 71,969 – 29,400). And, Foss RMCD has a storage right in 101,832 acre-feet (i.e. 168,732 – 66,900).

Second, even if the author adopts the OWRB position that evaporation is not a component of the water right, Fort Cobb RMCD has a storage right of 53,969 acre-feet (i.e.

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[75] Public Law 419, 70 Stat. 29, 84th Cong. (Feb. 25, 1956) (the authorized purposes give some indication of the amount of water needed to fulfill those purposes.)

[76] Reclamation Definite Plan 1958 (Reclamation gave some, indefinite indication of the amount of water being withdrawn by the choices Reclamation made about the capacity of the reservoirs as divided into the three pools – inactive/dead pool; conservation pool; and flood pool. The flood pool is not considered usable water for the reservoir.)

[77] Reclamation determined the amount of water to request for vested rights by taking the firm yield and adding evaporation for the maximum year of evaporation. Memorandum from Area Engineer (Flaigg) to Reclamation Office File (Jan. 22, 1969).

71,969 – 18,000 acre-feet), meaning the amount of evaporation goes into the storage right. Similarly, Foss RMCD would have a storage right of 150,732 acre-feet (i.e. 168,732 – 18,000), meaning the amount of evaporation goes into the storage right.

Third, Reclamation, and Fort Cobb RMCD and Foss RMCD have never claimed, much less pursued, a water right to the top-of-the-conservation pool. When Reclamation formally withdrew the waters of the rivers and streams for Mountain Park Master Conservancy District and Lugert-Altus Irrigation District, Reclamation specified the withdrawn waters as all unappropriated waters in those rivers and streams. In this author's mind, the Reclamation withdrawals letters for MPMCD and LAID allow a plausible legal argument that MPMCD and LAID have a claim to all water to the top-of-the-conservation pool.[78] By contrast, the Fort Cobb RMCD and Foss RMCD have a different water rights profile that begins with their 1968 water rights applications seeking 29,400 acre-feet and 66,900 acre-feet respectively. Consequently, this author does not see a plausible legal argument for Fort Cobb RMCD and Foss RMCD attempting to establish a water right to the top-of-the-conservation pool. As a result of the differing water rights profile, this author presented (and rejected) a top-of-the-conservation pool analysis for MPMCD and LAID, but does not do so for Fort Cobb RMCD and Foss RMCD.

But the facts recited in the preceding two paragraphs lead the author to reach a fourth legal conclusion. When OWRB, Reclamation and the two Districts began to redetermine the Districts' water rights in the late-1970s and into the mid-1980s, everybody focused their

[78] For discussion of whether MPMCD or LAID have a water right to the top-of-the-conservation pool, read Chapter 3, Part II(b) and Chapter 4, Part II(b), respectively. The author concluded that neither MPMCD nor LAID had a water right to the top-of-the-conservation-pool.

attention on the firm yield and agreed that the firm yield should be the Districts' water right.[79] Everybody eventually agreed that that firm yield was, coincidentally, 18,000 acre-feet per year for both Fort Cobb RMCD and Foss RMCD. But firm yield, as defined,[80] exclusively looked at the firm yield necessary to meet contractual obligations for municipal, industrial, and irrigation beneficial uses – i.e. the amount of water that the Districts would take out of the reservoirs for users paying the reimbursable costs of the Reclamation projects.

By this definition of firm yield, as understandable as the definition is to assure economic viability and functional operation for Reclamation projects, and by this focus (exclusively) on firm yield, everybody appeared to forget that Congress authorized purposes for these two Districts that do not involve taking water out of the reservoirs. In the 1956 authorizing legislation, Congress authorized "… providing for the preservation and propagation of fish and wildlife, and of enhancing recreation opportunities."[81] In this author's opinion, OWRB, Reclamation, and the Districts unintentionally forgot these non-consumptive purposes for the Districts and, therefore, forgot the amount of water (i.e. water right) needed to fulfill these non-consumptive purposes. The author also notes that these non-consumptive purposes -- fish, wildlife, and recreation -- are distinct from the legitimate issue of how to handle evaporation loss – an issue that OWRB, Reclamation and the Districts debated extensively during the

[79] *See* documents cited in fns. 46 & 54 (and accompanying texts) in this Chapter and OWRB Final Order of June 14, 1983 (Final Order for Fort Cobb RMCD) # 15 quoted in the text of this Chapter at pp. 209-210.

[80] Letter from Robert Weimer, Reg. Dir. Reclamation to James Barnett, Exec. Dir. OWRB (Dec. 5, 1980) at pp. 1-2: "Our definition of firm yield is the amount of water that can be withdrawn from the reservoir each year including the years of most critical drought of record under the conditions of flow and reservoir sedimentation assumed for the study."

[81] Public Law 419, 70 Stat. 29, 84th Cong. (Feb. 25, 1956).

redetermination of the Districts' water rights from 1979 through 1985 and which all parties agreed should be considered in water rights accounting.

If the author's legal conclusion is correct that Fort Cobb RMCD and Foss RMCD might be entitled to a water right for fish, wildlife, and recreation, this conclusion itself raises a number of legal issues. Remember that Congress authorized these fish, wildlife, and recreation purposes in 1956 and OWRB, the two Districts and Reclamation reached agreed redetermined water rights in Permit 51-128 on June 14, 1983 for Fort Cobb RMCD and in Permit 51-127 on August 7, 1985 for Foss RMCD. Hence, the author considers the relevant time period for determining these legal issues to be from 1956 to 1985 – using the laws, regulations, and cases as in effect during that time-period.

Section 8 of the Reclamation Act of 1902[82] mandates that Reclamation proceed in conformity with State water law as Reclamation builds projects authorized by the federal Congress. Thus, to resolve whether Fort Cobb RMCD and Foss RMCD are entitled to a water right for fish, wildlife, and recreation, the author must interpret Oklahoma stream water law as in effect in the period from 1956-1985.

The Oklahoma Legislature has never defined "beneficial use." However, the Legislature has enacted two statutes that make reference to beneficial use by providing a non-exclusive list of identified purposes that qualify as beneficial use. In the 1972 Oklahoma Ground Water Code, the Legislature identified agriculture, domestic, municipal, industrial and other (unspecified)

[82] 43 U.S.C. §§ 372 & 383 (2020). These two sections codify Section 8 as adopted in 1902.

beneficial uses for groundwater resources.[83] In 1993, the Legislature stated a policy to "protect, maintain and improve the quality thereof for public water supplies, for the propagation of wildlife, fish and aquatic life and for domestic agricultural, industrial, recreational and other legitimate beneficial uses; …"[84]

OWRB has defined the term "beneficial use" in its regulations. In 1964, OWRB stated: "'Beneficial Use' means the use of such quantity of steam or groundwater when reasonable intelligence and reasonable diligence are exercised in its application for a lawful purpose and as is economically necessary for the purpose."[85] In 1973, OWRB added a second sentence to the definition that reads: "Beneficial uses include but are not limited to municipal, industrial, agricultural, irrigation, recreation, fish and wildlife, etc."[86] OWRB defines "beneficial use" with these two sentences – the narrative sentence and the non-exclusive list sentence – as the regulatory definition today in 2021.

While the law of prior appropriation has long recognized that the term "beneficial use" is a term that changes with societal conceptions of "beneficial uses," in Oklahoma in 1968 when Fort Cobb RMCD and Foss RMCD applied for vested rights, the term "beneficial use" had not clearly been expanded, either legislatively or administratively, to include recreation, fish, or

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[83] Okla. Stat. Tit. 82 § 1020.2(A) (2011) (eff. July 1, 1973).

[84] Okla. Stat. Tit. 82 § 1084.1 (2011) (eff. July 1, 1993).
Related to the discussion in the text, D. Couch & L. Klaver, *Beneficial Use in Oklahoma Water Law: Opportunity for Better Management or More Mischief?,* 64 OKLA. L. REV. 615 (2012), especially pp. 628-634 (Beneficial Use Defined by Rule) and pp. 644-652 (Beneficial Use, Nonconsumptive Use and Instream Flow Use).

[85] OWRB Rule 115.1 (1964).

[86] OWRB Rule 300.1(o), 600.1(g) (1973).

wildlife. Hence, applicants and administrators in Oklahoma in 1968 might well have been reluctant to seek or to grant a water right in 1968 that specifically and distinctly identified an amount for beneficial use for recreation, fish, and wildlife. However, in 1973 in an administrative rule, OWRB adopted a definition of beneficial use that included "recreation, fish and wildlife." Moreover, when OWRB issued its Final Order # 33 on August 12, 1969 giving a vested right Priority 5-1 to Fort Cobb RMCD and vested right Priority 5-2 to Foss RMCD, OWRB listed "fish and wildlife, recreation" as purposes for the use of the vested rights. Today in 2021, these three uses are clearly beneficial uses of stream water in Oklahoma.

Oklahoma,[87] along with Western Law of prior appropriation, conceptually had considered a physical diversion of the water as an element a prior appropriation water right. Does a claim to a water right in a reservoir satisfy the "physical diversion" for a prior appropriation stream water right? The answer must be "yes" or otherwise Reclamation reservoirs would not have gained state granted water permits since the passage of the Reclamation Act in 1902. A reservoir itself is a visible physical diversion of the water of a stream from its normal flow downstream in the stream channel. More specifically, when OWRB granted Permit 68-332 (April 13, 1971) to Fort Cobb RMCD and Permit 68-296 (August 17, 1971) to Foss RMCD, OWRB stated that the water to be diverted for these two permits comes from Fort Cobb Reservoir and Foss Reservoir, respectively.

Without doubt, Fort Cobb RMCD and Foss RMCD could today assert a water right for

[87] *Gates v. Settlers' Milling, Canal & Reservoir Co.,* 19 OK 83, 91 P. 856; Okla. Stat. Tit. 82 § 105.11(A) (2011) (applicant must give public notice in a newspaper in the county of the point of diversion).

beneficial purposes for recreation, fish and wildlife. More importantly, in light of the language of the 1951 and 1953 Plans of Improvement, the 1956 Congressional authorization, the 1969 vested-rights determination, the 1971 permits, and the 1973 administrative rule, Fort Cobb RMCD and Foss RMCD can legitimately assert that they are entitled to a water right for recreation, fish and wildlife with a priority date of February 9, 1951.

The author postulates that Fort Cobb RMCD and Foss RMCD might consider petitioning OWRB to amend their final water permits with the goal of seeking additional water, in quantified amounts, for the purposes of fish, wildlife, and recreation as authorized by Congress for the Upper Washita River Basin reservoirs. The Districts could seek these additional quantified water rights with a priority date of February 9, 1951.

Quantifying the water rights of Fort Cobb RMCD and Foaa RMCD has several advantages. First, if the Districts gained water right for the additional beneficial purposes of recreation, fish and wildlife, the Districts obviously would have a larger amount in acre-feet of permitted (perfected) water rights. Second, by having a larger amount of water rights, the Districts would be able to seek protection for that larger amount at an earlier point in time during a drought or other shortage situations. The Districts would be able to assert interference[88] with their water rights sooner when their water rights are quantified above the 18,000 acre-feet per year that is reflected in the language of their current permits. Third, if the Districts were able to obtain protection for this larger amount of water rights, all of which are non-consumptive uses,

[88] Part III of this Chapter discusses the concept of interference under Oklahoma stream water law as applied to Fort Cobb RMCD and Foss RMCD.

the Districts effectively would have the ability to better protect its core water rights for municipal and industrial users that the Districts are contractually obligated to protect. In other words, quantifying the Districts' non-consumptive water rights means that the Districts are at less risk of failing to deliver water under their water supply contacts and, therefore, at less risk of failing to meet their existing financial obligations (e.g. O&M, etc.) and debt service. Those who have contracts for consumptive use for municipal and industrial uses have contractual obligations to reimburse the Districts for their proportionate share of capital and O&M costs to store and convey water for those ultimate beneficial users. Fourth, if the Districts have a quantified right to these additional beneficial purposes, arguably there is no need for a "Schedule of Use" in the permit because the Districts have a right to the quantified amount regardless of the amount of water actually conveyed to contractual water users. In other words, quantifying the Districts' water rights also may mean that the Districts are at less risk of a reduction in water rights under a "lose it or use it" approach implied by having a Schedule of Use in a water permit.

One remaining issue needs brief discussion – the procedure by which to pursue quantification.

As evidenced by the fact that Foss RMCD's water right has been amended three times, OWRB and the Districts may be able to use the same procedure to seek an amendment for quantification of the Districts' water rights for recreation, fish and wildlife purposes. OWRB provides a procedure for the amendment of stream water rights in its regulations.[89]

[89] Okla. Admin. Code § 785: 20-9-4 (2014). If OWRB and the Districts used this amendment procedure, the Districts would have to petition for the amendment and give notice in county newspapers, as designated by OWRB. Those who oppose the amendment could file protests and trigger hearings. *Id.* at § 785: 20-9-4(d).

As an alternative to the administrative amendment procedure, OWRB and the Districts might turn to the procedures in Okla. Stat. Tit. 82 §§ 105.6, 105.7 and 105.8 (2011). These three statutory provisions allow for an administrative general stream adjudication of an identified stream (or stream segment), which is usually a complex and daunting task.[90]

To be clear, quantifying the Districts' water rights for recreation, fish and wildlife is not an application for a new water right. Rather, the Districts would be seeking to establish the quantity of their water rights that they have had ever since Reclamation filed its 1951 Plan of Improvement with the State of Oklahoma on February 9, 1951.

c. Additional stream water rights for Fort Cobb RMCD and Foss RMCD

The author begins this discussion of additional water rights for Fort Cobb RMCD and Foss RMCD by emphasizing that these are additional stream water rights. These additional water rights are separate and distinct from, and additional to, the water rights that the Districts hold under their present Permits 51-128 (August 23, 1983) and 51-127 (February 2, 1996), respectively. These additional rights would not in any way undermine the Districts' present water rights holding a priority date of February 9, 1951. Rather, these additional water rights would have their own priority date based on the manner of obtaining the additional water rights.

Under Oklahoma law, Fort Cobb RMCD and Foss RMCD have the statutory right to apply for a water right.[91] In the interest of protecting their permitted and quantified water rights,

[90] The Oklahoma legislature adopted the procedures of Okla. Stat. Tit. 82 §§ 105.6 to 105.8 in 1972. Laws 1972, c. 256 §§ 6-8. These sections replaced the procedure for determining persons possessing vested rights to water set forth in Okla. Stat. Tit. 82 § 6 (1971).

[91] Okla. Stat. Tit. 82 §§ 105.9-105.11 (2011).

the two Districts might well consider applying for new, additional water rights in all unappropriated water[92] above their reservoirs for the purposes of recreation, fish and wildlife purposes. The "unappropriated" recreation, fish and wildlife water rights are completely distinct and separate from the Reclamation recreation, fish and wildlife water rights discussed in subsection (b) above with regard to quantifying their water rights under their present permits.[93]

As recreation, fish and wildlife are beneficial purposes under Oklahoma law, Fort Cobb RMCD and Foss RMCD gain several advantages if they were granted water rights in all unappropriated water upstream from their lakes. The Districts gain these advantages even though they would have the most junior water right on the stream as the new water right would have the priority date as of the date of application.[94] As the Districts are seeking new water rights, they would not be able to claim a priority date based on the Reclamation Plan of Improvement of February 9, 1951.

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[92] The author emphasizes that the Reservoirs would be applying for all unappropriated water on the streams above their lakes. The Reservoirs would not be applying for a specific quantity of water but rather "all unappropriated waters" whatever that quantity might be year-to-year and however that variable quantity might be estimated using OWRBV formulas or Reclamation surface water modeling.

The author acknowledges that the statutory language about granting a water permit may not allow a water permit for "future availability" of water. Under present practice and formulas, OWRB grants permits for "unappropriated water" presently existing in the stream. Thus, it may be that the Districts would apply for a new additional water right in the "all unappropriated water" not upstream but in the Reservoirs themselves when the Reservoirs are full – to the top of the conservation pool.

[93] When OWRB conducted comprehensive water planning, OWRB concluded that "Surface water in the [Fort Cobb Reservoir] basin is fully allocated, limiting diversions to existing permitted amounts." OCWP West Center 2012 at p. 46. OWRB also concluded that "Surface water in the [Foss Reservoir] basin is fully allocated, limiting diversions to existing permitted amounts." *Id.* at p. 66.
If Fort Cobb RMCD and Foss RMCD applied for all "unappropriated waters" above their reservoirs, these applications do not contradict the OCWP conclusions of 2012 because the closure to new permits in the basins related to diversions directly from the basins' streams. The Districts' applications would not seek diversions from the streams but, rather, the capture of water in heavy rainfall or flood events into the reservoirs themselves. During heavy rainfall or flood events, there is additional water that the reservoirs can capture into storage.

[94] Okla. Admin. Code § 785: 20-2-2 (Definition of "Priority") and § 785: 20-7-1(g) (2014).

First, Fort Cobb RMCD and Foss RMCD would no longer face the worry that persons upstream might apply for and receive newly permitted prior appropriation rights. The Districts would be in a much better legal position by having the most junior water right in all unappropriated water in its reservoir drainage basins than in having other new non-District water-right holders in the upstream watersheds. After all, if the Districts had the most junior water right for all unappropriated water, the Districts would not have to sue themselves in order to protect their senior water-rights with the priority of February 9, 1951 during times of drought. Moreover, if other non-District upstream water-right holders were to come into existence, the Districts would have an even greater number of junior water-right holders against whom the District would have to seek interference protection in times of drought.[95]

Second, if the Districts have a new junior water right in all unappropriated water upstream from their reservoirs, existing senior and junior prior appropriators also benefit. The Districts' new junior water-right is for non-consumptive uses. For existing senior and junior prior appropriators, it is more beneficial to have all unappropriated water turned into a non-consumptive permit than potentially to have additional competing junior consumptive water-right holders come into existence. The fewer the diversions upstream from the Districts' reservoirs, the lesser the competition among consumptive water users.

Third, the Districts have schedules of use attached to their Permits. Thus, under Oklahoma law, the Districts face the possible reduction of their core water rights under the "use

[95] As to what protections the Districts might be able to seek to protect their senior water-right, the author will discuss these issues in Part III of this chapter.

it or lose it" principal of prior appropriation water law.[96] By gaining a water right for non-consumptive uses of water for recreation, fish and wildlife in all remaining unappropriated waters upstream of the Districts' reservoirs, the Districts mitigate this risk. If the Districts lost some amount of acre-feet from its core water rights, existing junior appropriators upsteam or downstream from the reservoirs would have a claim to the "lost" water that now, once again, belongs to the stream system. But this loss would be offset by the inflow of the newly granted non-consumptive water right for recreation, fish and wildlife. Furthermore, if the Districts have water rights in all unappropriated waters upstream of their reservoirs, the Districts have precluded any additional juniors coming into existence to make a claim for "lost" water. In other words, by having a new water right for non-consumptive purposes of recreation, fish and wildlife, the Districts, in practical terms, convert their potential "lost" water into its permitted non-consumptive water right for recreation, fish and wildlife.

Fourth, if the Districts obtained a water right in all unappropriated waters upstream of their reservoirs, the Districts would have a permitted (vested) water right in all water in the reservoir. In other words, the Districts' control over the water in storage in their reservoirs would be thereafter a vested water right, not just a storage right. The immediate consequence of having a vested water right in all water in their reservoirs would be that nobody else could apply for a water permit in "surplus" water in storage.[97] There would be no "surplus" water in storage because all water in storage would be a permitted water right held by the Districts. The Districts

[96] Okla. Stat. Tit. 82 §§ 105.17 & 105.18 (2011). In other words, the Districts are at some risk of a reprise of the "use it or lose it" disputes of the late-1970s and early-1980s, described in earlier parts of this Chapter.

[97] Okla. Stat. Tit. 82 § 105.21 **Surplus Water** (2011).

would be the master of the water in Fort Cobb reservoir and Foss reservoir.[98]

Reclamation and the Districts might consider a second, alternative approach to securing additional, new water rights for the Districts for recreation, fish and wildlife. Since the Washita River Basin Act in 1956, Congress has authorized Fort Cobb RMCD and Foss RMCD to use water for the purposes of recreation, fish and wildlife. Therefore, Reclamation has the authority to seek water for recreation, fish and wildlife for these two Districts and their reservoirs. Using this authority, Reclamation could provide a withdrawal notice to OWRB for all unapproporiated waters upstream from Fort Cobb Reservoir and Foss Reservoir.[99] By giving a withdrawal notice, Reclamation and the Districts gain the date of the notice as the priority date, have three years to develop a plan for these non-consumptive uses at the reservoirs and eight years to complete the projects from the date of filing the plans with OWRB. With Reclamation's plans in hand, the Districts could then make the formal application for a new, additional water right for recreation, fish and wildlife – beneficial uses of water that Oklahoma stream water law now clearly recognizes in 2021.

III. PROTECTING THE STREAM WATER RIGHTS OF FORT COBB RMCD AND FOSS RMCD

The prior appropriation system of water law has a foundational principle: "first in time is first

[98] *See*, Okla. Att'y Gen Op. 71-280 (Dec. 30, 1971) (opinion relating to interpretation of the "excess" or "surplus" water statute of Oklahoma cited in the preceding footnote.) *See also*, Letter from Guy Keith, Chairman, OWRB to Billie Bryan, President Fort Cobb RMCD (May 26, 1971) (informing Fort Cobb RMCD that it was required to sell surplus water to downstream irrigators); Letter from J. A. Bradley, Reg. Dir. Reclamation to Hubert Miser, Chairman, Washita Irrigators, Inc. (Aug. 4, 1972) (about an inquiry to purchase surplus water from FORT COBB RMCD). *Cf. also*, *Wagoner County Rural Water District No. 2 v. Grand River Dam Authority*, 2010 OK CIV APP 95, 241 P.3d 1132 and *Rural Water, Sewer and Solid Waste Management District No. 1 Logan County v. City of Guthrie*, 2014 OK CIV APP 48, 325 P.3d 1.

[99] Okla. Stat. Tit. 82 § 105.29 (2011). Reclamation would have to comply with significant procedural obligations as set forth in § 105.29 (2011).

in right." OWRB has adopted this foundational principle in its regulations: "… Among regular permit holders, priority in time, determined by the date of filing an application as provided in these rules, shall give the better right."[100]

Fort Cobb RMCD and Foss RMCD have a recognized priority date of February 9, 1951, judicially established,[101] for their vested rights and permit rights to stream water. Reclamation has an on-going Upper Washita Basin Study in cooperation with OWRB and the two Districts.[102] As part of this on-going study, Reclamation has prepared a Reservoir Fact Sheet for each reservoir.

For Fort Cobb RMCD, Reclamation found the following:[103]

- Zero (0) senior stream water right permits;
- Seven (7) junior stream water right permits in the amount of 893 acre-feet per year.

For Foss RMCD, Reclamation found the following:[104]

- Six (6) senior stream water right permits in the amount of 490 acre-feet per year;
- Forty-seven (47) junior stream water right permits in the amount of 5,057 acre-feet per year.

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[100] Okla. Admin. Code § 785: 20-7-1(g) (2014).

[101] *Oklahoma Water Resources Board v. Foss Reservoir Master Conservancy District*, 1974 OK 113, 527 P.2d 162; *Oklahoma Water Resources Board v. Fort Cobb Reservoir Master Conservancy District*, No. 45982 Unpublished Opinion (Oct. 1, 1974). (The author has the unpublished opinion in his files.)

[102] Memorandum of Agreement No. R13MA60023 for Upper Washita Basin Study (March 2013).

[103] OWRB, Fort Cobb Reservoir Summary Fact Sheet (no date), available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43 .

[104] OWRB, Foss Reservoir Summary Fact Sheet (no date), available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43 .

In other words, Fort Cobb RMCD and Foss RMCD hold a priority (seniority) for their stream water rights – both the core water right for municipal and industrial purposes and any quantified water right for recreation, fish and wildlife purposes – that makes those rights senior to all but a few number (6) and a small amount (490 acre-feet) of senior competing stream water-rights holders. Thus, Fort Cobb RMCD and Foss RMCD have senior water rights that should be secure so long as competing junior stream water rights (54 in number and 5,950 acre-feet in amount) do not interfere. Of course, these Fort Cobb RMCD and Foss RMCD senior water rights must be distinguished from the Districts' junior water rights in all unappropriated waters upstream from the reservoirs, if the Districts were to apply for and obtain a new water right for recreation, fish and wildlife purposes.

With this information about the two Districts' priority status and competing stream water right holders, the author turns to discuss how the Districts can protect their senior stream water rights.

a. Protecting senior stream water rights from interference by junior stream water rights

Oklahoma statutes only provide one explicit enforcement mechanism to OWRB to use to protect a senior stream water rights holder from a junior stream water rights holder. In Okla. Stat. Tit. 82 § 105.20 **Violations**, the unauthorized use of water (i.e. the use of water in violation of the priority between water users) is declared a misdemeanor and subject to civil injunction.[105] Senior stream water rights holders can activate § 105.20 by filing a complaint with the OWRB

[105] Okla. Stat. Tit. 82 § 105.20 (2011). Section 105.20 ends with this sentence: "The Board and its authorized agents shall have a reasonable right to go upon private property in the performance of their duties hereunder and shall have the duty to file complaints of violations of the penal provision of this section."

which initiates an investigation and requires the OWRB to respond as to the appropriate action to take.[106] In addition to OWRB action, individual water-rights holders can bring their own law suits to protect their water rights.[107] Therefore, Fort Cobb RMCD and Foss RMCD can file a complaint with OWRB or bring a law suit to protect its senior stream water rights. But as Oklahoma water law history indicates, rarely does anyone invoke either of these two statutes for enforcement of water rights. Criminal actions, civil injunctions or private lawsuits certainly have an enforcement role, but these methods are costly, time-consuming, and, most importantly, very likely to be too slow and too ineffective in actually protecting a senior stream water right from interference.

The Legislature has granted the OWRB expansive powers over the waters of the state. In accord with Okla. Stat. 82 § 1085.2, OWRB has the authority:

> "1. Generally to do all such things as in its judgment may be necessary, proper or expedient in the accomplishment of its duties; …
> "7. To promulgate such rules and make orders as it may deem necessary and convenient to the exercise of any of the powers or the performance of any of the duties conferred or imposed upon it by this or any other law;
> "8. To institute and maintain, or to intervene in, any actions or proceedings in or before any court, board, commission or officer of this or any other state or the United States to stop or prevent any use, misuse, appropriation or taking of any of the water of this state which is in whole or in part in violation of any law, or any rules, orders, judgments or decrees of any court, board …"

OWRB has used this broad authority to impose conditions upon water rights at the time of application and after issuance of a permit, when necessary to promote beneficial use of

[106] Okla. Admin. Code § 785: 1-11-1 (2014).

[107] Okla. Stat. Tit. 82 § 105.5 (2011).

Oklahoma water.[108] Similarly, OWRB might be able to use this broad authority to create an administrative procedure to prevent or to stop a junior water-rights holder from interference with a senior stream water right. If OWRB were to create such an administrative procedure, what might the administrative procedure contain?

The author believes that OWRB has the authority to adopt regulations that are specific to situations that are most likely to present issues regarding the protection of senior stream water rights. In other words, the author believes that OWRB does not have to adopt regulations about interference by junior stream water rights that are applicable statewide and in every conflict situation between seniors and juniors.[109] Most importantly for Fort Cobb RMCD and Foss RMCD, the author believes that OWRB has the authority to draft regulations specific to the water rights of each Upper Washita River Basin reservoir – i.e., Fort Cobb RMCD and Foss RMCD.

Focusing on Fort Cobb RMCD and Foss RMCD and their water rights, OWRB could identify interference triggers to write into its regulations.[110] OWRB could then use those triggers to take administrative action to protect senior stream water rights held by Fort Cobb RMCD and Foss RMCD. OWRB could draft an interference chapter for its regulations that is specific to

[108] See, Okla. Att'y Gen. Op. 72-23 (Jan. 12, 1973) (affirming that OWRB can impose time-of-use conditions upon regular permits for water.)

[109] OWRB may well be wise to leave disputes between most individual water-right holders to those individuals themselves through the filing of private litigation under Okla. Stat. Tit. 82 § 105.5 (2011).

[110] In adopting regulations about interference, OWRB must comply with the Oklahoma Administrative Procedures Act and other statutes governing the adoption of regulations. The author does not address these procedural requirements for the valid adoption of regulations.

these two Districts and their senior stream water rights.[111]

As the author has described in Part II(a) of this Chapter, OWRB, Reclamation and the two Districts disputed how to handle evaporation loss within the context of water right permits. Ultimately, OWRB, Reclamation and the Districts agreed to grant the Districts a water right permit exclusive of unavoidable evaporation loss.[112] If unavoidable evaporation loss is not part of the Districts' water right, then it would seem that unavoidable evaporation loss must be accounted for as part of any protection OWRB provides to Fort Cobb RMCD and Foss RMCD for their senior stream water right as against junior stream water-rights holders.

When thinking of triggers for the invocation of interference regulations, and in light of the evaporation loss disputation, Fort Cobb RMCD and Foss RMCD reasonably could propose that one trigger for OWRB enforcement is the District's water right permit (coincidentally 18,000 acre-feet per year for both Districts) plus the unavoidable evaporation loss at each reservoir. For Fort Cobb Reservoir, it appears that OWRB has determined that the unavoidable evaporation loss is 19,049 acre-feet per year.[113] For Foss Reservoir, it appears that OWRB has

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[111] The author envisions an OWWRB chapter on interference specific to Fort Cobb RMCD and a chapter on interference specific to Foss RMCD. The Districts could invoke the procedures of their specific chapter. Indirectly, other water-right holders senior to Foss RMCD (six seniors) also would benefit from this interference chapter because when Foss RMCD takes action to preclude juniors from taken waters upstream from Foss Reservoir, all upstream seniors on the Washita River would benefit. Recall that Reclamation shows that there are no senior stream water rights above Fort Cobb Reservoir.

[112] Letter of James Barnett, Exec. Dir. OWRB to Robert Weimer, Regional Director Reclamation (July 16, 1981) wherein Mr. Barnett writes: "… I believe our only point of difference was one of procedure on how to administratively acknowledge, treat and record the matter of evaporation loss from the reservoir. Our mutual acknowledgment that even though the evaporation loss from the reservoir must be duly accounted for, it should not be considered as part of the 18,000 acre-feet authorized for actual use and appropriation, would appear to effectively resolve any further problems respecting the procedural treatment of evaporation losses."

[113] OWRB Final Order Fort Cobb RMCD June 14, 1983 at p. 4.

determined that the unavoidable evaporation loss is 29,920 acre-feet per year.[114] Stated concretely, Fort Cobb RMCD could proposed that OWRB adopt regulations stating that junior stream water-rights holders interfere with Fort Cobb RMCD's water right when the Fort Cobb Reservoir falls to or below a storage capacity of 37,049 acre-feet (18,000 + 19,049). Similarly, Foss RMCD could propose interference when Foss Reservoir falls to or below a storage capacity of 47,920 acre-feet (18,000 + 29,920).[115] If junior stream water-rights holders had to stop taking stream water at this trigger level, then any further decline in capacity of storage in the reservoirs would be due solely to consumptive water usage by the Districts, evaporation and continuing drought. Juniors would no longer be a cause of declining storage. Thus, the interference trigger of the water right plus unavoidable reservoir evaporation loss is a clear, easily identified trigger that appears to protect the firm yield of the reservoirs.[116]

Another approach to adopting a trigger for interference regulations is to focus on hydrological factors. Focusing on hydrological factors is likely a better approach for an interference trigger than the evaporation trigger discussed in the preceding paragraph. This is so because the evaporation approach is a year-by-year trigger whereas the hydrological approach

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[114] Explanatory sheet attached to OWRB Permit 68-296 (Aug. 17, 1971).

[115] The author suggests these trigger levels for Fort Cobb and Foss Reservoirs based on past studies about evaporation loss at the two reservoirs. These studies are from 1983 and 1971, respectively. OWRB, Reclamation, and the Districts could do studies now to verify the evaporation loss occurring most recently and then use these updated figures for the interference triggers.

[116] If the water right of Fort Cobb RMCD and Foss RMCD were quantified to include recreation, fish and wildlife, the interference regulation would become effective at a higher level of storage capacity in each reservoir. Of course, it is important to remember that if Fort Cobb RMCD and Foss RMCD sought a new water right for all unappropriated waters upstream from their reservoirs, this new water right is the most junior water right on the stream system. As the most junior water right, this new water right has no protection through interference regulations because all other water-rights holders are senior to this most junior water right.

better accounts for multi-year droughts. A multi-year drought is a greater threat to reservoir storage than the yearly evaporation.

In crafting regulations to protect the two Districts' water rights, OWRB could consider factors affecting the water supply – such as the hydrological factors that OWRB takes into account in making a determination whether or not unappropriated water is available in a stream when an applicant applies for a regular water permit.[117] OWRB lists these specific factors as mean annual precipitation run-off in the watershed above the point of diversion, existing appropriations, other designated purposes (e.g. Interstate Compacts) dependable yield from reservoir or pond, and Board review of proposed present and future needs.[118] By focusing on hydrological factors and dependable yield from the reservoirs, OWRB could craft interference regulations specific to Fort Cobb RMCD's and Foss RMCD's senior stream water rights that clearly and directly reflect protections for the water supply of their reservoirs. By focusing on hydrological factors and dependable yield from the reservoirs, OWRB also could identify an interference trigger that does not too often burden junior stream water-right holders and that promotes the maximization of beneficial uses for all water-rights holders on the relevant stream systems.

In cooperation with OWRB and the four Districts that are partners in this legal-review (Fort Cobb RMCD, Foss RMCD, Mountain Park Master Conservancy District (MPMCD) and Lugert-Altus Irrigation District (LAID)), Reclamation has produced two documents that provide

[117] Okla. Stat. Tit. 82 § 105.12(A) (2011).

[118] Okla. Admin. Code § 785: 20-5-5 (2014).

a careful study of the hydrological factors and conditions relevant to these Districts.

For Fort Cobb RMCD and Foss RMCD specifically, Reclamation prepared a study[119] that focused on enhanced drought response reservoir operations (EDRRO) with a study objective as follows:

"3. Use the "Enhanced" Firm Yield model to evaluate "what if" demand management scenarios and identify the association risk of a M&I [municipal and industrial] reservoir going dry based on the type of drought you may (or may not) be experiencing (i.e. enhanced drought response)."[120]

And in the conclusion to this enhanced drought response study, Reclamation wrote:

Even though the EDRRO model has demonstrated itself as a powerful and promising tool to enhance drought planning and response, it is important to stress that the EDRRO model should not be used in a vacuum. Complimentary efforts should be undertaken to address other risks to reservoirs supply, such as those associated with land development, permitting, and water use that may occur upstream of a reservoir. … In coordination with state and local officials, we are currently exploring how the EDRRO model could be used to inform decision-making regarding demand curtailments of junior water right holders upstream of Foss and Fort Cobb Reservoirs in conjunction with demand reductions of reservoir customers."[121]

In January 2020, Reclamation completed an analysis[122] of drought indices and triggers collaboratively with OWRB that related to MPMCD's Tom Steed Reservoir and stated its goals as:

1. Protect reservoir dependable yield during drought periods while attempting to

[119] Reclamation, Reservoir Operations Pilot Study – Final Report: Washita Basin Project, Oklahoma (May 2018). [hereafter Reservoir Operations Pilot Study 2018]

[120] Reservoir Operations Pilot Study 2018 at p. ES-3.

[121] Reservoir Operations Pilot Study 2018 at p. ES-6 and p. 76.

[122] Reclamation and OWRB, Upper Red River Basin Study: Formulation of Curtailment Alternatives in the Tom Steed Reservoir Hydrologic Basin (Draft January 2021. [hereafter TS Curtailment Analysis, 2021].
A similar analysis could be done specifically for Fort Cobb RMCD and FOSS RMCD. Or, the information learned in the Tom Steed Analysis may be sufficiently robust as to apply to Fort Cobb RMCD and Foss RMCD without the need for an additional analysis.

maximize beneficial use within in the basin.

2. Identify and evaluate a range of "triggers" to curtail junior surface water rights during "droughts." Triggers should be based on a combination of one or more Local Drought Indicators (LDIs) and Regional Drought Indicators (RDIs)."[123]

The author has highlighted these two collaborative studies because they provide hydrological and reservoir storage methodologies that OWRB could consider in adopting regulations specific to Foss RMCD and Fort Cobb RMCD. OWRB could consider these two collaborative documents plus similar hydrological studies specific to the Upper Washita River.[124] Then based on comments and evidence received in hearings to develop interference regulations, OWRB could select the precise triggers that both protects the Districts' senior stream water rights and maximizes beneficial use in the relevant stream basins. Of course, OWRB's choice of the precise triggers depends upon the specific local and regional drought indicators selected and on the actual quantity of the Districts' defined senior stream water rights. In the author's opinion, if OWRB adopted interference regulations based on hydrological factors (drought indicators) and defined senior stream water rights (dependable yield), OWRB would be taking actions based on hydrology and science which are consistent with Oklahoma stream water law.

Once OWRB adopted interference regulations specific to Fort Cobb RMCD and Foss RMCD, OWRB could also create an administrative procedure to enforce these interference regulations. For example, based on drought indicators and reservoir levels, OWRB could give junior stream water-right holders advance warning that drought conditions are approaching the

[123] TS Curtailment Analysis, 2021 at p. 1.

[124] Reclamation is preparing hydrological studies on the Washita River as part of its presently on-going Upper Washita Basin Study.

trigger point. When the trigger point arrives, OWRB could notify juniors to cease using water so as to protect the Districts' senior stream water rights.[125]

As explained above, OWRB has the delegated authority to protect senior streamwater rights. Adoption of interference regulations specific to Fort Cobb RMCD and Foss RMCD is within OWRB's power to protect senior stream water rights. Hence, OWRB does not need to rewrite the permits of junior stream water-right holders. Junior stream water-rights by being junior are always subject to curtailment to protect senior stream water rights. And, when OWRB adopts these interference regulations for the two Districts, OWRB could choose a trigger that indicates that all juniors need to cease taking water upstream of the reservoirs. By so doing, when the trigger point arrives for protection of the Districts' senior stream water rights, OWRB can order all juniors to stop without OWRB being required to begin with the most junior and work backwards to the most senior junior.[126] In other words, OWRB can select a trigger point that would apply to all juniors collectively without violating the "first-in-time first-in-right" principle of prior appropriation water law. Moreover, by OWRB adopting triggers, based on hydrology and dependable yield, that apply to all juniors collectively, OWRB may be able to avoid junior stream water-rights holders arguing the "futile call" doctrine when a senior claims

[125] In protecting the Districts' senior stream water rights, OWRB, Fort Cobb RMCD, Foss RMCD, and Reclamation would assuredly work together to manage the water supply. As for management options, read TSReservoir Analysis 1-2020 at pp. 65-67. Aside from brief mention in the text to raise management issues, this academic study focused on legal rights is not the proper place to discuss these management decisions.

[126] Compliance by juniors with the order to cease using water is a distinct issue from the adoption of regulations and enforcement procedures when the trigger point arrives. This academic study is not the proper place to discuss these compliance issues. *But see*, Okla. Stat. Tit. 82 § 105.20 (2011) and the text accompanying fn. 105 above in this chapter.

interference.[127]

If OWRB were to adopt interference regulations for Fort Cobb RMCD and Foss RMCD, OWRB would likely also need to address the endpoint of interference. When does the interference come to an end so that juniors may once again take water from upstream of the reservoirs? By contrast to the trigger for invoking the interference regulation, when the Districts might be worried about OWRB acting too slowly to declare interference, the Districts might be worried about OWRB acting too quickly to declare interference at an end. The author believes that OWRB would likely choose the endpoint of interference based on hydrological factors (drought conditions) and defined senior stream water rights (dependable yield) that indicate that protection for senior stream water rights is no longer justified. OWRB can do so by relying upon the Reclamation documents already cited on enhanced drought response[128] or by identifying and evaluating unique drought triggers at Foss and Fort Cobb Reservoirs as part of the ongoing Upper Washita Basis Study – as is currently being done for Tom Steed Reservoir under the Upper Red River Basin Study.[129] While the author does not believe that OWRB must choose the identical trigger for initiating the interference regulation as for ending the interference regulation, OWRB must choose the ending trigger point so as to be defensible both in hydrology and Oklahoma stream water law.

The author would summarize the key points for the development of interference

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[127] For a brief discussion of the "futile call" doctrine, D. Getches, WATER LAW IN A NUTSHELL (4th Ed. 2009) at pp. 110-111.

[128] *E.g.*, Reservoir Operations Pilot Study 2018.

[129] TSAnalysis 1-2020.

regulations as follows:

OWRB could use hydrological information (drought conditions and reservoir level) and defined water rights (dependable yield) specific to Fort Cobb RMCD and Foss RMCD so as to both protect senior stream water rights from interference while maximizing beneficial use for all water-right holders taking water from the streams above the reservoirs. If OWRB develops interference regulations based on this approach, as exemplified in the collaborative studies just cited in the preceding two footnotes, the author believes that OWRB would have defensible interference regulations in hydrology and in Oklahoma stream water law.

b. Protecting Regular Permits from Seasonal, Temporary, Term and Provisional Permits

In 1972, the Legislature enacted the following statutory language:

> "[OWRB]j is authorized to issue, in addition to regular permits, seasonal, temporary, term, or provisional temporary permits at any time the Board finds such issuance will not impair or interfere with domestic uses or existing rights of prior appropriators and may do so even when it finds no unappropriated water is available for a regular permit. All seasonal, temporary, term and provisional temporary permits shall contain a provision making them subject to all rights of prior appropriators."[130]

From the statutory language, OWRB's authority to grant non-regular permits is discretionary and each non-regular permit must be subject to all rights of prior appropriators. Fort Cobb RMCD and Foss RMCD complained that OWRB granted non-regular permits, during times of drought, even though the Districts considered those non-regular permits were impairing and interfering with their senior stream water rights. OWRB granted provisional temporary (90-day) stream water permits above Foss Reservoir on average of 325 acre-feet per year since 1992

[130] Okla. Stat. Tit. 82 § 105.13 (2011).

with a maximum grant of 3,359 acre-feet in the year 1998.[131] OWRB granted provisional temporary stream water permits above Fort Cobb Reservoir on average of 36 acre-feet per year since 1992 with a maximum grant of 577 acre-feet in the year 2002.[132]

If OWRB adopted interference regulations specific to Fort Cobb RMCD and Foss RMCD, as discussed in Part III(a), OWRB could also address interference by non-regular permits with regular stream water permits. OWRB could decide that the interference trigger selected for protecting senior stream water rights from junior stream water rights would also apply to protect regular permit water rights from non-regular permits. OWRB could choose the same trigger point based on the same hydrology and reservoir levels because the drought conditions are such that any further removal of water from the streams supplying Fort Cobb Reservoir and Foss Reservoir would interfere with and impair the Districts' vested water rights. By adopting the identical interference trigger for non-regular permits, OWRB would be constraining its discretion to grant non-regular permits and making effective the mandatory provision that non-regular permits are subject to all prior appropriations. As shown by the granting of non-regular permits during drought conditions, the Districts appear to have a legitimate complaint that its senior water rights are protected on paper (i.e. on the priority lists in the files of OWRB), but not in the reality of water supply management under drought conditions.

OWRB could also adopt the identical end point for interference so that OWRB regains its

[131] OWRB, Foss Reservoir Summary Fact Sheet (no date), available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43 .

[132] OWRB, Fort Cobb Reservoir Summary Fact Sheet (no date), available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43 .

discretion to grant non-regular permits in the streams feeding Fort Cobb Reservoir and Foss Reservoir. When the need for protection ends, non-regular permit applicants should have access to water so as to maximize the beneficial use of Oklahoma's stream waters.

OWRB has recently adopted regulations allocating ownership rights in brackish groundwater[133] to surface landowners overlying the brackish aquifer.[134] Surface owners can grant leases to companies, particularly oil and gas companies, for the use of their brackish groundwater. With a valid lease from surface owners, oil and gas companies can then apply to OWRB for provisional temporary groundwater permits.[135] With brackish waters available through provisional temporary groundwater permits, OWRB has an additional source of water for maximum beneficial use without the need to tap stream waters for these 90-day permits.

c. Dry-Year Option – Non-regulatory protection for stream water right(s).[136]

Thinking in terms of water law management in western states, Fort Cobb RMCD and Foss RMCD might consider alternative methods of protecting their water rights(s).[137] For

[133] Okla. Stat. Tit. 82 § 1020.1 (2011) provides the following definition: "'Fresh water' means water which has less than five thousand (5,000) parts per million total dissolved solids. For the purpose of this [Groundwater Law] all other water is salt water."
Brackish water has between 5,000 and 10,000 ppm of total dissolved solids.

[134] Jack Mooney, *"Marginal" water eyed for wider use*, THE OKLAHOMAN at A12 (Feb. 19, 2020). These new OWRB regulations are not yet legally effective because the Legislature and Governor must still approve.

[135] Okla. Stat. Tit. 82 § 1020.10 (2011) – authorizing provisional temporary groundwater permits.

[136] Fort Cobb RMCD has a stream water right under Permit 51-128 (June 14, 1983); Foss RMCD has a stream water right under Permit 51-127 (Feb. 2, 1996). Both Districts may acquire a new, additional water right for all unappropriated water. Hence, the author used the word "water(s)" in this heading about non-regulatory protection.

[137] *E.g.* Environmental Defense Fund, *Alternative Water Transfers in Colorado: A Review of Alternative Transfer Mechanisms for Front Range Municipalities* (Nov. 2016); [hereafter cited EDF Alternatives]; J. King & J. Ecklund, *Water Transfer Options*, THE WATER REPORT (Issue 172, June 15, 2018).

example, the Districts might consider an alternative transfer method commonly called a "dry-year option." A dry-year option is: "A long-term lease agreement that maintains water in the original use in most years, but provides an intermittent water supply to other uses under preset conditions."[138]

Junior stream water-rights holders could consider long-term lease agreements with senior stream water-rights holders upstream from the reservoirs by which the seniors would refrain from taking water under the preset condition of, as an example, OWRB invoking the interference regulations.

Foss RMCD is a junior stream water-right holder to those prior appropriators who have a priority date before the Reclamation withdrawal of Washita River water on February 9, 1951.[139] For example, if Foss RMCD had entered a lease for these senior water rights in drought and declining-reservoir-level years, Foss RMCD would have additional inflows to the reservoir that would provide increased protection for its municipal, industrial and "quantified" water rights. Foss RMCD and the senior stream water-rights holders would voluntarily enter into these dry-year option leases.[140]

Several attributes of these dry-year option leases appear to exist. First, by being a

[138] EDF Alternatives at p. 13 Table 1 (classifies dry-year options as an "interruptible water supply agreement.")

[139] Recall that OWRB found that there are no senior stream water rights above Fort Cobb Reservoir. So, Fort Cobb RMCD has no need to use dry-year option leases to protect its most senior water right. By contrast, OWRB found that there are six senior stream water rights above Foss Reservoir totaling 490 acre-feet per year. A list of permits is provided at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43 .

[140] By contrast, with respect to junior stream water-right holders, Fort Cobb RMCD and Foss RMCD would seek to use interference statutes and regulations to require juniors to quit taking water from the stream.

voluntary, temporary transfer of water rights (as opposed to a permanent transfer of a water right), statutes applicable to permanent transfers or change in beneficial purposes or permitted water rights do not apply.[141] Second, nobody should have standing to object to a senior voluntarily refraining to take water from the stream. Seniors not entering dry-year option leases still get to take their water in accord with their priority date. Juniors to Foss RMCD would not have a legal basis to complain because Foss RMCD is capturing this water for its water right senior to those of the juniors. Third, Foss RMCD can write the terms of the lease so that the lease operates for only six continuous years so that the senior does not lose its senior stream water right.[142]

Of course, Foss RMCD also would likely need to consider several complications relating to dry-year option leases to protect its water rights. First, Foss RMCD would want to consider whether the cost of leasing the water is a sensible economic investment for a sensible price. Second, Fosss RMCD would need to take into account the transaction costs of negotiating and maintaining these lease agreements, including renegotiating leases at the end of the six-year terms. Third, Foss RMCD should determine whether dry-year option leases would result, in fact, in additional inflows into the Foss Reservoir; in other words, Foss RMCD may not want to pay for "paper" water.

IV. FORT COBB RMCD AND FOSS RMCD STREAM WATER RIGHTS AND GROUNDWATER

[141] Okla. Stat. Tit. 82 § 105.22 (Severance and transfer of water right) & § 105.23 (Uses of water for other purposes) (2011).

[142] Okla. Stat. Tit. 82 § 105.17 (2011) (a water-right holder loses the water right if "for a period of seven (7) continuous years" the water-right holder does not appropriately use a permitted water right).

a. Oklahoma Groundwater Law, Fort Cobb Reservoir and Foss Reservoir

The Oklahoma Comprehensive Water Plan correctly and succinctly states: "With the exception of the Arbuckle-Simpson aquifer system, conjunctive management of supplies is not mandated under Oklahoma water law."[143] Expanding the meaning of this quoted sentence, Oklahoma water law mandates public sovereignty of water in definite streams (prior appropriation)[144] and, concurrently, mandates private ownership of groundwater (allocated ownership to landowners overlying an aquifer).[145] Applying these two preceding sentences to Fort Cobb RMCD and Foss RMCD means that OWRB manages the Districts' vested rights in the stream waters of the reservoirs' catchment basins independently and separately from overlying landowner groundwater rights in the alluvial and bedrock aquifers of these catchment basins. OWRB properly follows Oklahoma water law for independent and separate management of stream water and groundwater even though OWRB also acknowledges:

"… water resources may be hydraulically connected and the uses of each can affect the other water resource. In other words, the pumping of groundwater could have an effect on a stream if the aquifer and stream are hydraulically connected. Likewise, the diversion of surface water could also have an effect on the aquifer's long-term water supply."[146]

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[143] OWRB. Oklahoma Comprehensive Water plan 2011 Update: Technical Memorandum: Conjunctive Water Management in Oklahoma and Other States (Nov. 2010) at p. 4. [hereafter cited TechMemo Conjunctive Water Management]

[144] Okla. Stat. Tit. 82 §§ 105.1 through 105.33 (Stream Water Use) (2011).

[145] Okla. Stat. Tit. 60 § 60 **Ownership of Water – Use of Water** (2011). Okla. Stat. Tit. 82 §§ 1020.1 through 1020.22 (Oklahoma Groundwater Law) (2011). In § 1020.1 **Definitions**: ""'Groundwater' means fresh water under the surface of the earth regardless of the geologic structure in which it is standing or moving outside the cut bank of any definite stream."

In light of this definition, both bedrock aquifers and alluvial aquifers, being outside the cut bank of any definite stream, classify as groundwater under Oklahoma water law.

[146] TechMemo Conjunctive Water Management at p. 4.

Since 2013, OWRB, the Districts and Reclamation have had an on-going study of the Upper Washita River Basin.[147] As part of that study, they have collaboratively published two reports and have one proposed study[148] on the Rush Springs Aquifer – the most significant bedrock groundwater aquifer underlying the catchment basins of Fort Cobb Reservoir and Foss Reservoir. From reading these three reports, the author understands that the groundwater aquifers in the Districts' catchment basins have, among others, the following attributes:

For Foss Reservoir, the Cloud Chief formation of the Rush Springs aquifer is a relatively impervious formation that generally underlies the Washita River alluvial aquifer upstream and downstream of Foss Reservoir. The Cloud Chief formation holds the alluvial waters in the alluvial aquifer and prevents those alluvial waters above from percolating into the deeper Rush Springs bedrock aquifer. Therefore, there is weak interconnection between the alluvial aquifer and the bedrock aquifer on the Foss Reservoir segment of the Washita River. However, the Washita alluvial aquifer itself provides significant base flow to Foss Reservoir.[149]

For Fort Cobb Reservoir, the alluvial aquifers of the three streams (Cobb Creek, Lake Creek, and Willow Creek) that flow into the Reservoir interconnect extensively with the Rush Springs

[147] Memorandum of Agreement No. R13MA60023 for Upper Washita Basin Study (Mar. 2013).

[148] USGS, Simulated Effects of Groundwater Withdrawals on Streamflow Depletion in the Rush Springs aquifer upgradient from Fort Cobb Reservoir, western Oklahoma – a Project Proposal (Draft, April 3, 2020) [hereafter USGS Draft RSAquifer Simulated Effects 2020]; USGS, Simulation of Groundwater Flow and Analysis of Projected Water Use for the Rush Springs Aquifer, Western Oklahoma – Scientific Investigations Report 2018-5136 (2018) [hereafter USGS Groundwater Flow & Analysis RSAquifer 2018]; OWRB, Hydrologic Investigation Report of the Rush Springs Aquifer in West-Central Oklahoma, 2015 (Publication 2018-01, Aug. 2, 2018) [hereafter OWRB RSAquifer Report 2018].

[149] The author discusses the legal implications of this significant base flow to Foss Reservoir in the following Part IV(b) of this Chapter.

bedrock aquifer. These three alluvial aquifers and Rush Springs provide significant base flow to Fort Cobb Reservoir.[150] Thus, there is a strong interconnection between the groundwater aquifers (alluvial and bedrock) and Fort Cobb Reservoir.

From these same three Rush Springs aquifer reports cited in footnote 148 of this Chapter, the author understands that the Washita River from the Oklahoma border with the Texas Panhandle past Foss Reservoir to Clinton is generally a gaining stream. However, above Foss Reservoir, the Washita River Reach One has two segments that USGS recently determined to be losing stream segments.[151] Similarly, the author understands that the three streams (Cobb Creek, Lake Creek, and Willow Creek) flowing into Fort Cobb Reservoir are also gaining streams. By being gaining streams, the Washita River at Foss Reservoir and the three creeks at Fort Cobb Reservoir are gaining waters from the interconnected aquifers – be it the alluvial aquifer for the Washita River or the combined alluvial and bedrock aquifers for the three creeks.

To the author's knowledge, there are two possible legal arguments to reclassify certain, specified Oklahoma groundwater (i.e. water under the surface of the earth regardless of geologic structure) as stream water. If these certain, specified waters were, in Oklahoma law, stream waters, OWRB would then be mandated to manage these reclassified waters using Oklahoma's prior appropriation laws. Note that this reclassification of certain, specified Oklahoma

[150] The author discusses the legal implications of this significant base flow to Fort Cobb Reservoir in the following Part IV(b) of this Chapter.

[151] USGS, Hydrogeology, Numerical Simulation of Groundwater Flow, and Effects of Future Water Use and Drought for Reach 1 of the Washita River Alluvial Aquifer, Roger Mills and Custer Counties, Western Oklahoma, 1980-2015: Scientific Investigation Report 2020-XXXX (Draft Report August 2020) at p. 28, 45, Table 1 and Figure 20. Figure 20 provides a color visualization of gaining and losing segments on Reach 1 (Oklahoma-Texas border to Clinton) of the Washita River. (hereafter USGS DRAFT Reach 1 August 2020).

groundwater as stream water would not mean that OWRB is engaged in conjunctive management of stream water and groundwater. Rather, this reclassification simply would remove certain, specified Oklahoma groundwater from management under the groundwater laws to management under the stream water laws. Fort Cobb RMCD and Foss RMCD both have a stream water priority date of February 9, 1951 that predates all but a very few groundwater wells in their catchment basins[152] because farmers did not adopt groundwater irrigation until after 1951.[153]

These two possible legal arguments are:

First, that The Legislature impermissibly moved alluvial waters from being public waters to private ownership waters in 1967 and 1972 amendments to Oklahoma's water law – the alluvial waters argument.

Second, that Oklahoma water law could make a distinction between gaining streams (groundwater movement to streams) and losing streams (stream water movement to aquifers) – the losing stream argument.

These two legal arguments about reclassifying alluvial waters and losing stream waters involve the interpretation of multiple Oklahoma water law statutes. Thus, the reclassification arguments are not specifically directed to the interaction between the stream water and

[152] For Foss Reservoir, there is only one groundwater permit prior to 1951, totaling 138 acre-feet per year. OWRB, Foss Reservoir Summary Fact Sheet (no date). For Fort Cobb Reservoir, there are five groundwater permits prior to 1951, totaling 757 acre-feet per year. OWRB, Fort Cobb Reservoir Summary Fact Sheet (no date). Both fact sheets are available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43 .

[153] Agricultural irrigation accounts for 91% of groundwater use within the boundaries of the Rush Springs aquifer. Public Water supply accounts for an additional 7.8% of groundwater use. OWRB RSAquifer Report 2018 at pp. 1-2.

groundwater of the Washita River basin. Consequently, reclassifying alluvial water and/or losing stream waters would have a statewide impact. And assuredly, any reclassification would become Oklahoma water law only after litigation and a definitive Supreme Court of Oklahoma opinion.

In Chapter 2 on Background Law, OKLAHOMA LAW, Ground water defined, the author discussed these two reclassification arguments and, therefore, does not repeat these arguments and authorities here. For purposes of this chapter, what is most important is that, to the author's knowledge, neither of these two legal arguments have ever been presented to Oklahoma courts.[154] The author does not believe that his remit for this academic research report includes discussing the wisdom, practical consideration, and likelihood of success of a reclassification lawsuit. The author believes his remit ends with bringing this reclassification issue to the attention of the study partners – OWRB, Reclamation, and the two Districts.

One final comment about these reclassification arguments seems pertinent to the Upper Washita River Basin. As already stated, the author understands the hydrology of the Washita River at Foss Reservoir and the hydrology of Cobb Creek, Lake Creek, and Willow Creek at Fort Cobb Reservoir to indicate that these streams are generally gaining streams, not losing streams.[155] Fort Cobb RMCD would lack a factual basis for bringing a losing stream

[154] Two Oklahoma Supreme Court decisions discuss the distinction between stream water and groundwater. *Messer-Bowers Co., Inc. v. State ex. rel. OWRB,* 2000 OK 54, 8 P.3d 877; *OWRB v. City of Lawton,* 1977 OK 89, 580 P.2d 510.

[155] By contrast, the hydrology of the North Fork of the Red River (the stream that flows into the W.C. Austin Project of the Lugert-Altus Irrigation District) indicates that the NFRR is a losing stream. Therefore, Chapter 4, Part IV(a), on the Lugert-Altus Reservoir, provides additional discussion of the losing stream legal argument.

reclassification lawsuit. By contrast, Foss RMCD would have a factual basis for bringing a losing stream reclassification lawsuit with regard to two segments of the Washita River upstream from Foss Reservoir.

b. Oklahoma Groundwater Law and Fort Cobb RMCD and Foss RMCD stream water rights

From the two Rush Spring aquifer studies published since 2018,[156] it is clear that the amount of water in storage in both Foss Reservoir and Fort Cobb Reservoir is significantly interconnected with the baseflows upgradient on the Washita River (Foss) and the Cobb, Lake and Willow Creeks (Fort Cobb).[157] In the OWRB RSAquifer Report 2018 report, the Washita River stream flow into Fort Cobb indicates 49% baseflow on Cobb Creek, 37% baseflow on Lake Creek and 39% baseflow on Willow Creek, which baseflow comes from both the alluvium surrounding the creeks and on the discharge from the bedrock Rush Springs aquifer into the alluvium.[158] In the USGS Groundwater Flow & Analysis RSAquifer 2018 document, the USGS gives the Washita River 53.2% baseflow at the Hammon gauge above Foss Reservoir and 48.3% at the Foss gauge just below the Reservoir itself.[159] Regarding the Fort Cobb Reservoir, USGS

[156] Fn. 148 above in this chapter has the citations to these two reports and one proposal. Two reports (OWRB RS Aquifer Report 2018 and USGS Groundwater Flow & Analysis RSAquifer 2018) are in final published format; USGS Draft RSAquifer Simulated Effects 2020 is a draft proposal, subject to additional revision.

[157] Stream flow has two major components: 1) precipitation runoff from rainfall and snowmelt; 2) ground-water discharge from aquifers into the stream. USGS, Streamflow and the Water Cycle (June 12, 2019) at p. 5. Ground-water discharge from aquifers into streams is "baseflow." And in Oklahoma, snowmelt is a minor component of precipitation runoff.

[158] OWRB RSAquifer Report 2018 at p. 12 Table 3 (Cobb, Lake, Willow Creek gauges; mean annual stream flow compared to mean annual baseflow).

[159] USGS Groundwater Flow & Analysis RSAquifer 2018 at p. 9 Table 2 (Hammon streamgage and Foss streamgage; % baseflow index).

finds a baseflow of 53.9% for Cobb Creek, 53.2% baseflow for Lake Creek, and 58.0% baseflow for Willow Creek.[160] While the OWRB and USGS baseflow figures use differing time periods and are therefore not identical, both sets of figures emphasize the significant importance from baseflow for the Districts' reservoir storage.[161]

There are 272 groundwater permits upstream of Foss Reservoir on the Washita River, totaling 105,632.7 acre-feet per year.[162] There are 799 groundwater permits upstream from Fort Cobb Reservoir, totaling 151,579 acre-feet per year.[163] While these numbers clearly indicate greater agricultural irrigation in the smaller Fort Cobb catchment basin, the author thinks the visual impact of the difference between Foss Reservoir and Fort Cobb is even more striking with a USGS map showing the permitted groundwater wells. Seeing the USGS map, the concentration of permitted groundwater wells in the Fort Cobb catchment basin is readily apparent.[164] USGS further emphasized the concentration of groundwater usage in the Fort Cobb

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[160] *Id.* at p. 10 Table 2 (Cobb, Lake, Willow streamgages; % baseflow index).

[161] As USGS wrote in the 2018 report, "… Because more than half of the streamflow in Cobb, Lake and Willow Creeks upstream from Fort Cobb Reservoir occurs as base flow (Table 2), groundwater-level declines in the aquifer upgradient from Fort Cobb Reservoir greatly affects stage and storage. Therefore, Fort Cobb Reservoir storage for permitted withdrawals is dependent on base-flow inflows." *Id.* at p. 65.

The OWRB RSAquifer Report 2018 and the USGS Groundwater Flow & Analysis RS Aquifer 2018 are quite similar and congruent, but not identical, because based on different periods of record for their data.

[162] OWRB, Foss Reservoir Summary Fact Sheet (no date) available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43 .

[163] OWRB, Fort Cobb Reservoir Summary Fact Sheet (no date) available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43 .

[164] USGS Groundwater Flow & Analysis RSAquifer 2018 at p. 23, Figure 10 (Location of permitted groundwater wells). In its April 2020 study proposal, USGS wrote, "Nearly half of all permitted groundwater withdrawals (867 of 1891) in the Rush Springs aquifer occur within the surface-water basin of the Fort Cobb Reservoir." USGS RSAquifer Simulated Effects 2020 at p. 7.

catchment basin by writing,

> "The Fort Cobb Reservoir watershed contained the largest concentration of groundwater use in the Rush Springs aquifer. … Although this watershed contains only 6.7 percent of the Rush Springs aquifer surface area (213,895 out of 2,181,003 acres), mean annual groundwater use from this watershed accounts for 52 percent (34,521 acre-ft/yr) of the mean annual groundwater use in the aquifer (65,763 acre-ft/yr, …)[165]

In light of the data presented in the preceding several paragraphs, the two Districts may consider urging OWRB to limit groundwater pumping as much as OWRB has the legal authority to do so. As Oklahoma water law manages stream water rights and groundwater rights independently and separately, the Districts would not be able to assert that their stream water rights have priority over groundwater rights. Thus, the Districts would not have any legal basis for making an interference claim that groundwater permits are impairing their stream water rights and their reservoirs' water supply. Hence, the Districts would have to look to influence OWRB within the present Groundwater Law in order for the Districts to protect the groundwater baseflow for their reservoirs' water supply.

It is important for the Districts to understand that groundwater under the Oklahoma Groundwater Law is the property of the overlying landowner.[166] While the State of Oklahoma has the sovereign power (and exercises that power) to regulate vested rights in groundwater, the State of Oklahoma cannot take away an overlying landowner's property right to groundwater

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[165] USGS Groundwater Flow & Analysis RSAquifer 2018 at p. 22.

The Rush Springs Aquifer underlies a much larger land area than just the land area constituting the catchment basins of Foss Reservoir and Fort Cobb Reservoir. Consequently, many groundwater wells pumping from the Rush Springs aquifer have no interconnection with and no impact upon the water supply of Foss Reservoir and Fort Cobb Reservoir. *See, Id.* at p. 3, Figure 1 (Rush Springs study area) and p. 23, Figure 10 (Location of permitted groundwater wells in the Rush Springs study area).

[166] *See especially,* Okla. Stat. Tit. 60 § 60 (2011). *See also, Jacobs Ranch, LLC v. Smith,* 2006 OK 34, 148 P.3d 842.

without just compensation. A practical implication of groundwater being a private property right is that there is no "use it or lose it" attribute to groundwater and Oklahoma groundwater law – which is quite in contrast to stream water and Oklahoma prior appropriation stream water law.[167]

Building on the above sketch of baseflow and groundwater usage in the Foss Reservoir and Fort Cobb Reservoir catchment basins, the author now uncouples the two reservoirs for further discussion of the interrelationship between Oklahoma groundwater law and each District's stream water rights.

Fort Cobb Reservoir

OWRB manages groundwater through four steps: 1) conduct hydrological surveys and investigations of groundwater aquifers to gather information;[168] 2) based on the surveys and investigations, set a tentative maximum annual yield (MAY) for each aquifer based upon a minimum life of twenty years for the aquifer;[169] 3) hold hearing to establish a final MAY for the aquifer which is then allocated to each acre of land overlying the aquifer, thereby giving each overlying landowner an equal-proportionate share (EPS) in the waters of the aquifer;[170] and 4) accept and rule upon applications from overlying landowners who are seeking a permit for beneficial use of their allotted EPS.[171]

[167] Okla. Stat. Tit. 82 § 105.2 (2011) for stream water: "Beneficial use shall be the basis, the measure and the limit of the right to the use of water …"; Okla. Stat. Tit. 82 § 105.17 **Reversion of water to public** (2011).

[168] Okla. Stat. Tit. 82 § 1020.4 (2011).

[169] Okla. Stat. Tit. 82 § 1020.5 (2011).

[170] Okla. Stat. Tit. 82 § 1020.6 (2011).

[171] Okla. Stat. Tit. 82 §§ 1020.7 through 1020.9 & 1020.15 (2011).

In setting a tentative determination of the MAY for an aquifer, OWRB must take into account "the rate of recharge to the basin or subbasin and the total discharge from the basin or subbasin."[172] In addition, OWRB must determine a basin life that is a minimum of twenty years.[173] In light of these statutory obligations, OWRB arguably has the authority to consider (to some extent) groundwater and surface water interactions as OWRB sets a minimum basin life.[174] Furthermore, in light of the Water for 2060 Act,[175] OWRB has the authority to select a minimum basin life with an emphasis on conservation, meaning that OWRB legally could set a minimum basin life of fifty years for the Rush Springs aquifer and the alluvial aquifers of Cobb, Lake, and Willow Creeks (i.e. approximately the year 2070).[176]

If OWRB set, for example, a fifty-year basin life for the Rush Springs aquifer and its interconnected alluvial aquifers of the three creeks, while taking into account groundwater and surface water interactions, OWRB could set an EPS for each overlying landowner that controls the authorized pumping in such a way as indirectly to protect the water supply of

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Okla. Admin. Code Tit. 75, Ch. 20 **Taking and Use of Groundwater** sets forth the administrative rules by which OWRB implements the citated statutes from the Oklahoma Groundwater Law. *See also*, OWRB, Maximum Annual Yield Fact Sheet (no date), available at www.owrb.ok.gov.

[172] Okla. Stat. Tit. 82 § 1020.5(A)(4) (2011).

[173] Okla. Stat. Tit. 82 § 1020.5(B) (2011).

[174] *See also*, Okla. Admin. Code § 785: 46-17-3(b) (2014). In this antidegradation provision, OWRB indicates that MAY determinations take into consideration the interconnection between baseflow and groundwater withdrawals for purposes of protecting water quality.

[175] Okla. Stat. Tit. 82 § 1088.12 (2020 Supp.).

[176] The Water for 2060 Act sets the policy objective that Oklahoma will use no more fresh water by and after 2060 than Oklahoma used in 2010. Hence, the author chose a fifty-year aquifer life as the "minimum" life of the aquifer so as to meet this Water for 2060 Act policy objective.

Fort Cobb Reservoir. By setting a smaller EPS, each landowner can pump less groundwater per acre each year and by pumping less groundwater per acre each year, the baseflows of Cobb Creek, Lake Creek, and Willow Creek may gain protection.

OWRB's authority to determine a MAY and allocate an EPS for the Rush Springs aquifer is an especially powerful legal authority at present (the year 2021) because OWRB has not determined a MAY and an EPS for the Rush Spring aquifer and its interconnected creek alluvial aquifers.[177] Without an OWRB determined MAY and EPS, groundwater pumpers have temporary permits that allow them to pump at a default rate of 2 acre-feet per acre per year.[178] Thus, when OWRB determines a MAY and an EPS for the Rush Springs aquifer, OWRB might well reduce the pumping rate to below the default rate.

In the proceedings to determine a Rush Springs aquifer MAY and EPS, the Districts (especially Fort Cobb RMCD) and Reclamation may consider highlighting evidence from the three recent Rush Springs aquifer reports that supports OWRB adopting a conservation-oriented EPS. The Districts could encourage OWRB to consider an EPS that maintains baseflows above certain thresholds so as to assure that the three creeks feeding into Fort Cobb Reservoir have adequate stream flows that protect Fort Cobb RMCD's stream water rights – i.e. the water rights in the waters of Fort Cobb Reservoir. To give concrete meaning to this and the preceding paragraphs, the author selects hydrological examples from the USGS 2018 Report for brief

[177] OWRB RSAquifer Report 2018 at p. 2 **Purpose and Scope.**

[178] Okla. Stat. Tit. 82 § 1020.11(b)(2) (2011) (statutory default rate of a minimum of 2 acre-feet annually).

discussion.[179]

In its Groundwater Flow & Analysis RSAquifer 2018 document, USGS wrote as follows:

> "The EPS scenarios for the Rush Springs aquifer were run for periods of 20, 40, and 50 years [minimum basin life scenarios]. The 20-, 40-, and 50-year EPS pumping rates under normal recharge conditions were 0.82, 0.49, and 0.43 acre-foot per acre per year, respectively. Given the 2,954,545-acre aquifer area used for the EPS scenarios, the 20-year rate corresponds to an annual yield of about 2,422,727 acre-feet per year. Groundwater storage at the end of the 20-year EPS scenario was about 13,321,000 acre-feet, or about 32,516,437 acre-feet (70 percent) less than the starting EPS scenario storage. This decrease in storage was equivalent to a mean groundwater-level decline of about 152 acre-feet. … Fort Cobb Reservoir stage was below the dead-pool stage after about 5 years of 20-year EPS pumping."[180]

In its Groundwater Flow & Analysis RSAquifer 2018 document, USGS also wrote as follows:

> "… The effects of well withdrawals were evaluated by comparing changes in groundwater storage between four 50-year scenarios using (1) no groundwater use, (2) mean groundwater use for the study period (1979-2015), (3) increasing groundwater use, and (4) groundwater use at the 2015 rate. The increasing-use scenario assumed a 38-percent increase in pumping over 50 years on the basis of 2010-2060 demand projections for western Oklahoma. Simulated groundwater storage changes ranged between an increase of 6.3 percent for the scenario with no groundwater use, and 0.9 percent for the scenario with 2015 groundwater-use rates. For the Fort Cobb Reservoir surface watershed, simulated groundwater storage changes ranged between an increase of 23.6 percent for the scenario with no groundwater use and a decrease of 4.0 percent for the increasing groundwater-use scenario. Groundwater-level changes were generally greater in areas with a large concentration of groundwater wells and groundwater use such as the Fort Cobb Reservoir surface watershed."[181]

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[179] The USGS Groundwater Flow & Analysis RSAquifer 2018 document is one part of the ongoing Upper Washita Basin Study. OWRB, Fort Cobb RMCD and Reclamation are working collaboratively to perform an updated analysis on impacts of various groundwater-pumping scenarios on reservoir storage.

[180] USGS Groundwater Flow & Analysis RSAquifer 2018 at p. 1 **Abstract**. *See also*, *Id.* at pp. 84-91 **Equal Proportionate Share** and **Uncertainty in Equal-Proportional-Share Results**.

[181] USGS Groundwater Flow & Analysis RSAquifer 2018 at p. 1-2 **Abstract**. *See also, Id.* at pp. 91-99 **Projected (50-year) Groundwater Use**.

The author has the following comments about Oklahoma Groundwater Law and the USGS Groundwater Flow & Analysis RSAquifer 2018 document just quoted.

Comment one: The 20-year basin life EPS pumping rate of 0.82 acre-feet per year on every acre has the impact of depleting the Rush Springs aquifer by seventy percent at the end of twenty years and causing the Fort Cobb Reservoir to go dry at the end of approximately 5 years of full pumping at the 0.82 EPS. Thus, the 20-year basin life EPS appears to be contradictory to the Water for 2060 Act that sets a conservation policy for water usage in the State of Oklahoma. Moreover, if OWRB adopted a 20-year basin life EPS of 0.82 that seriously threatened the viability of Fort Cobb Reservoir, state water law could well be in conflict with federal Reclamation law. Reclamation projects must abide by state water law for water rights. However, Reclamation projects are federal projects and state law cannot undermine the management of federal water projects.[182] Of course, full development[183] of 0.82 acre-feet per year on every acre in the Rush Springs aquifer (i.e., 2,422,727 acre-feet per year) greatly exceeds the present groundwater usage within the Rush Springs aquifer which is estimated to be 65,763 acre-feet per year (34,521 acre-feet per year within the Fort Cobb Reservoir basin).[184] Therefore, one could think of the 20-year basin life EPS of 0.82 acre-feet per acre per year as a worst-case scenario.

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[182] For discussion of the interplay between state water law for water rights and federal management of approved Reclamation projects, read Chapter 2 **Background law**, FEDERAL LAW, Reclamation Law.

[183] Full development of the EPS in the aquifer could occur in at least two ways: Farmers could irrigate every acre overlying the aquifer; Overlying landowners could sell their groundwater EPS to other users (e.g., municipal or industrial users) who could either transport the aquifer water or withdraw the water at another location through a new well. *See e.g.*, Okla. Admin. Rule. 785: 30-7 **Changes in Groundwater Rights** (2014).

[184] USGS Groundwater Flow & Analysis RSAquifer 2018 at p. 22.

Yet, context matters. The Fort Cobb Reservoir watershed (6.7% of the surface area of the Rush Springs Aquifer or 213,895 surface acres)[185] has temporary groundwater permits totaling 151,579 acre-feet/year[186] – i.e. 4.39 times higher than the reported usage of 34,521 acre-feet/year. Thus, in the Fort Cobb Reservoir watershed, temporary groundwater permits[187] presently are 86.4% of full development (213,895 surface acres) at an EPS of 0.82 acre-feet per year. By contrast, reported usage is 19.7% of full development (213,895 surface acres) at an EPS of 0.82 acre-feet per year.

Comment two. Context matters in another way because, in the previous paragraphs, the author treated the groundwater permits within the Fort Cobb Reservoir watershed as temporary permits. Some groundwater pumpers in the Fort Cobb watershed may claim that their groundwater right is a "prior use" right that OWRB cannot diminish through the current water law procedures for setting a MAY and an EPS.[188] The "prior use" right would originate under Oklahoma's first groundwater law of 1949.[189] Under the provisions of the 1949 law,

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[185] USGS Groundwater Flow & Analysis RSAquifer 2018 at p. 22.

[186] OWRB, Fort Cobb Reservoir Summary Fact Sheet (no date) available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43 .

[187] Groundwater permits in the Rush Springs Aquifer are temporary permits because OWRB has not yet determined a MAY/EPS for the Rush Springs Aquifer. Temporary permits have a default allowance of 2.0 acre-feet/year. Once OWRB completes a MAY/EPS for an aquifer, the temporary permit becomes a regular permit but with the EPS as determined by OWRB. Regular permits quite often carry an EPS that is smaller in amount than the default amount allowed for temporary permits. Okla. Stat. Tit. 82 § 1020.11(2011).

[188] Okla. Stat. Tit. 82 § 1020.14 (2011) states: "Nothing in this [Groundwater Law of 1973] shall be construed to deprive any person of any right to the use of groundwater in such quantities and amounts as were used or were entitled to be used prior to the enactment hereof. …"

[189] "Oklahoma Ground Water Law," Laws 1949, pp. 641-646, codified at Okla. Stat. Tit. 82 §§ 1001-1019 (Supp. 1949).

groundwater pumpers could apply for recognition of groundwater usage through procedures involving the OWRB and/or court adjudications.[190] However, the 1949 Oklahoma groundwater law limited water usage to "the safe annual yield measured by the average annual recharge …"[191] If groundwater usage exceeded the safe annual yield, then OWRB had the power "to require persons to cease such excessive withdrawals in reverse order of their priority of rights."[192]

In light of the data in the USGS Groundwater Flow & Analysis RSAquifer 2018 document, the average annual recharge in the Fort Cobb watershed is approximately 32,084 acre-feet per year.[193] Yet, there are outstanding groundwater permits in the Fort Cobb watershed of 151,279 acre-feet. In other words, the outstanding permits are 4.7 times greater in amount than the watershed's annual recharge. Consequently in accord with the 1949 Oklahoma Groundwater Law, OWRB apparently would have the power to require many "prior use" right claimants to cease their groundwater pumping, starting with the most-junior claimant.

Furthermore, the author does not know to what extent, OWRB made the 1949 Groundwater law operationally effective between 1949 and 1973 when the present Oklahoma groundwater law came into existence. To establish a water right under the 1949 law, groundwater pumpers had to fulfill specified procedural requirements and obtain administrative and/or judicial recognition. If groundwater pumpers did not fulfill these procedural requirements, then groundwater pumpers

[190] Okla. Stat. Tit. 82 §§ 1005-1014 (Supp. 1949).

[191] Okla. Stat. Tit. 82 § 1007 (Supp. 1949).

[192] Okla. Stat. § 1015 (Supp. 1949).

[193] USGS Groundwater Flow & Analysis RSAquifer 2018 at p. 17 and Figure 9 at p. 19.

may not be able to claim any "prior use" rights under the 1949 Groundwater law and to assert them as protected by the 1973 Groundwater law.[194]

Comment three. USGS calculated an EPS for the 40-year basin life (0.49 acre-feet per acre per year) and the 50-year basin life (0.43 acre-feet per acre per year). With these reduced EPS rates, the baseflows for Fort Cobb are protected for a longer time than the 20-year EPS of 0.82 acre-feet per acre per year.[195] Even with these reduced EPS rates, however, baseflows would eventually cease and Fort Cobb Reservoir would go dry. But if OWRB adopted one of these smaller EPS rates for a 40-year or 50-year basin life, OWRB provides Fort Cobb reservoir two advantages over a 20-year EPS. First, Fort Cobb simply has a longer assured period of baseflows and greater amounts of water in storage. Second, because these EPS rates presume full development (and the actual usage of water is less than 20% of full development), Fort Cobb and OWRB have more time for adopting programs and incentives for overlying landowners to assure that the actual usage never approaches full development. If full development never approaches, then an EPS rate at the USGS calculated 40-year or 50-year rate may protect Fort Cobb for the expected life of the reservoir, which is the year 2060.

Comment four. As for the 50-year scenarios that USGS modeled, if groundwater pumpers were given an EPS that matched scenario 2 (average groundwater use in the study period of

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[194] OWRB implements the "prior rights" of groundwater pumpers in Okla. Admin. Code Tit. 75, Ch. 30 (Taking and Use of Groundwater), Subchapter 11 (Recognition of Prior Rights to Groundwater) (2014).

As far as the author knows, the 1949 Oklahoma Ground Water Law and Okla. Stat. § 1020.14 (2011) have never been discussed in any depth in any judicial or administrative ruling. Therefore, although OWRB recognizes "prior use rights" in its administrative code, the meaning and implications of "prior use rights" in groundwater are an "unknown" in Oklahoma water law. Hence, the author's text in this Comment Two is highly speculative.

[195] USGS Groundwater Flow & Analysis RSAquifer 2018 at p. 88 Figure 51. Compare graph A (20-year EPS) to graph B (40-year EPS) and graph C (50-year EPS).

1979-2015), Rush Springs aquifer in the Fort Cobb basin would actual increase in aquifer storage by 46,000 acre-feet (1.2%), meaning that the baseflow would be protected and slightly enhanced on average. As for the 50-year scenario 4 (groundwater pumping at the rate reported for year 2015), USGS calibrated that the Rush Springs aquifer in the Fort Cobb basin would decline by 3.5% over those fifty years. Thus, if OWRB awarded an EPS matching the groundwater usage in year 2015, OWRB basically would be maintaining the present water usage in the Fort Cobb basin without significantly depleting the aquifer or significantly reducing the baseflows of the three tributary creeks to Fort Cobb Reservoir.[196] If OWRB selected an EPS reflecting one of these two hydrological alternatives, OWRB would have an EPS for the Rush Springs aquifer that is based on sound hydrology and is defensible under Oklahoma groundwater law.[197]

Comment five. USGS 50-year scenario 3 (increasing groundwater use) runs counter to the Oklahoma policy objective of using no more water in 2060 (and thereafter) than used in 2010 as set forth in the Water for 2060 Act. Thus, scenario 3 appears to be a legally disfavored scenario if OWRB complies with the Water for 2060 Act.

Comment six. As OWRB and the Districts navigate the procedures and hearings for adopting a MAY and allocating an EPS for Rush Springs aquifer, it is important to remember that whatever EPS is ultimately selected, the impact will be most heavily felt in the Fort Cobb

[196] Data for USGS scenarios 2 and 4 at Fort Cobb Reservoir is from USGS Groundwater Flow & Analysis RSAquifer 2018 at pp. 92-93, Table 13 and Figure 55(B). If OWRB set an EPS that matched scenarios 2 and 4, the entire Rush Springs aquifer would actually replenish storage by 2.3% and 0.9%, respectively. *Id.* at pp. 92-93, Table 13 and Figure 55(A). Replenishing the Rush Springs aquifer clearly accomplishes the State's conservation policy objective of the Water for 2060 Act.

[197] OWRB will likely consider many MAY alternatives. Other alternatives too, aside from tose being discussed in the text, could be hydrologically sound and defensible under Oklahoma groundwater law.

Reservoir basin. Fort Cobb Reservoir and its surrounding streams are where irrigated agriculture and groundwater pumping are most densely concentrated. Thus, in adopting a MAY and an EPS for Rush Springs aquifer, OWRB may focus special attention upon the storage in Fort Cobb Reservoir and the stream water rights of Fort Cobb RMCD.

Foss Reservoir

OWRB has the same statutory and administrative standards and procedures, as just described for the Fort Cobb Reservoir catchment basis, for the adoption of a MAY and an EPS for the aquifers in the Foss Reservoir catchment basin. Foss RMCD assuredly would urge OWRB to adopt a MAY and an EPS that would protect the largest baseflow possible for Foss Reservoir and, by protecting baseflow, also protect the water in storage in Foss Reservoir. OWRB and Foss RMCD would discuss and debate the appropriate MAY and EPS for these aquifers against the unique hydrological facts of the Foss Reservoir catchment basin. Several unique hydrological facts are worthy of emphasis.

The Rush Springs bedrock aquifer in the Foss Reservoir catchment basin does not significantly affect the baseflow of the Washita River upstream from Foss Reservoir. The three hydrological studies since 2018 of the Rush Springs aquifer indicate that the bedrock Rush Springs aquifer has minimal interconnection with the baseflow of the Washita River upstream from Foss Reservoir.[198] As a matter of general policy, Foss RMCD may urge OWRB to adopt a conservation-oriented MAY and EPS for the Rush Springs aquifer. However, the Rush Springs

[198] *See e.g.*, OWRB RSAquifer Report 2018 at pp. 1-14. *See also*, OWRB Groundwater Studies: Washita Alluvium & Terrace (Reach 1) Fact Sheet (no date), available at www.owrb.ok.gov.

aquifer MAY and EPS is not directly relevant to the protection of the Washita River baseflow for Foss Reservoir.

In addition, the other bedrock aquifers in western Oklahoma do not significantly interconnect with the Washita alluvial aquifer. As a practical matter, therefore, baseflow of the Washita alluvial aquifer upstream of Foss Reservoir does not come from bedrock aquifers.[199] The Washita alluvial aquifer does receive lateral inflows but those inflows apparently come from surrounding subsurface soil moisture, which soil moisture originates from surface precipitation. Of course, the Washita alluvial aquifer itself gains replenishment from recharge through surface precipitation that falls upon the land directly overlying the Washita alluvial aquifer itself.[200] Thus, the baseflow of the Washita River upstream from Foss Reservoir coming from the alluvial aquifer is almost entirely recharge from precipitation onto land directly overlying and surrounding the aquifer.

The Washita River alluvial aquifer does have significant effect on the stream flow of the Washita River upstream from Foss Reservoir.[201] Therefore, in protecting baseflow on the Washita River, Foss RMCD is most interested in the MAY and EPS on the Washita alluvial aquifer.

OWRB has already determined a MAY and an EPS for the Washita alluvial aquifer from the

[199] USGS DRAFT Reach 1 August 2020 at pp. 20-21 & 49-50.

[200] USGS DRAFT Reach 1 August 2020 at p. 2-3 and Table 5. Table 5 shows recharge at 15,370 acre-feet/year and lateral inflows at 2,308 acre-feet/year upgradient from Foss Reservoir.

[201] USGS Groundwater Flow & Analysis RSAquifer 2018 at p. 9 Table 2 (Hammon streamgage and Foss streamgage; % baseflow index); USGS DRAFT Reach 1 August 2020 at p. 9 (about 50% of surface-water inflow to Foss Reservoir is baseflow).

Oklahoma border with Texas to Clinton, Oklahoma a few miles below Foss Reservoir – called Reach 1 of the Washita River. OWRB set an EPS of 2.0 acre-feet per acre per year for landowners overlying the Washita alluvial aquifer.[202] OWRB describes the Washita alluvial aquifer in Reach 1, on average, as one-mile wide with 90 to 200 feet of saturated thickness. OWRB says that groundwater wells into this alluvial aquifer, on average, pump 600 gallons per minute of irrigation water.[203]

Okla. Stat. Tit. 82 § 1020.6(D) reads as follows:

> "The Board may, in subsequent basin or subbasin hearings, and after additional hydrologic surveys, increase the amount of water allocated but shall not decrease the amount of water allocated by regular permit issued prior to the completion of the additional hydrologic surveys."[204]

In light of § 1020.6(D), those existing groundwater pumpers with wells into the Washita alluvial aquifer have a vested right to pump 2.0 acre-feet per acre per year that cannot be diminished. When OWRB reviews and updates the MAY and EPS for the Washita alluvial aquifer, OWRB may decrease the EPS in light of the new hydrologic investigations. If OWRB allocates a reduced EPS to overlying landowners, OWRB can then apply that reduced EPS to those overlying landowners who seek a new groundwater permit after the redetermination.

In light of these statutory standards for OWRB, Foss RMCD has two distinct strategies to

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[202] OWRB, Maximum Annual Yield Fact Sheet at p. 2 (no date), available at www.owrb.ok.gov. OWRB set this MAY/EPS for Reach 1 on November 13, 1990.

[203] OWRB, Groundwater Studies: Washita Alluvium & Terrace (Reach 1) Fact Sheet (no date), available at www.owrb.ok.gov.

[204] Okla. Stat. Tit. 82 § 1020.6(D) (Supp. 2018). In 2018, the Oklahoma Legislature amended this subsection D by adding the language "by regular permit issued prior to the completion of the additional hydrologic surveys." (eff. Nov. 1 2018). OWRB has the discretionary authority to review and update aquifer hydrological studies at least every twenty years. Okla. Stat. Tit. 82 § 1020.4(C).

protect the baseflow of the Washita alluvial aquifer for water in storage in the Foss Reservoir.

With regard to those overlying landowners already having a vested right to pump 2.0 acre-feet per acre per year from the Washita alluvial aquifer, Foss RMCD could engage in educational efforts to assist landowners to manage their water resources so as to minimize the amount of water each landowner uses. Just as examples, possible educational and water conservation activities that might protect the baseflow of the Washita River could include irrigation improvements (drip-irrigation), or crop and variety selection that requires less water while still producing a profitable harvest (drought-tolerant crops or varieties), or change from irrigation farming to dry-land farming or pasture ranching.[205]

Foss RMCD could engage in these educational and conservation activities with the hope that overlying landowners will not fully develop their groundwater permits with an EPS of 2.0 acre-feet per acre per year on the Washita alluvial aquifer Reach one. For the period from 1967-2015, USGS reported that 245 groundwater permits from the Washita alluvial aquifer used on average 6,079 acre-feet per year. During the drought years of 2013 and 2014, the groundwater usage rose to over 10,000 acre-feet per year.[206] In a calculation for the different time-period of 1980-2015, USGS determined that 121 groundwater permits in the Washita alluvial aquifer upstream

[205] The author acknowledges that other options exist beyond those mentioned in the text. For additional discussion of options available, read OCWP West Central 2012 at pp. 65-73 (Basin 20). *See also*, Reclamation, Foss RMCD: Drought Contingency Plan (2018).

[206] USGS DRAFT Reach 1 August 2020 at pp. 15-16 and Figure 6. USGS did not indicate how many of these 245 groundwater permits were upstream from Foss Reservoir. OWRB has identified 272 groundwater permits upstream of Foss Reservoir, totaling 105,632.7 acre-feet. OWWRB, Foss Reservoir Summary Fact Sheet (no date) available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43. The OWRB Fact Sheet does not state how many of these 272 groundwater permits are into the Washita alluvial aquifer versus into the bedrock aquifers in western Oklahoma.

from Foss Reservoir used, on average, 4,923 acre-feet/year.[207] To this author, this data indicates that the actual usage of groundwater from the Washita alluvial aquifer is substantially less than the 2.0 acre-feet per acre per year that the existing groundwater permits authorize. The goal would be to encourage holders of groundwater permits to keep their groundwater usage to the low percentage of authorized amounts that they have historically used. The goal would be to encourage holders of groundwater permits to remain at their historical usage and to not increase groundwater pumping.

OWRB is presently in the process of reviewing and updating the hydrological information related to the Washita River alluvial aquifer Reach one.[208] In a USGS report for this review and update, USGS calculated EPS rates for a 20-year, a 40-year, and a 50-year basin life at the EPS rates of 1.7, 1.6 and 1.6 acre-feet per acre per year, respectively. The USGS concluded:

> The Washita River downstream of Foss Reservoir and the majority of streams in the study area were dry at the end of the 20-year equal-proportionate-share scenario. Foss Reservoir stage was below the dead-pool stage of 1,597.2 feet after about 7 years of pumping in the 20-year equal-proportionate-share scenario.[209]

USGS also calculated the impact of groundwater use in three scenarios: 2015 groundwater-pumping rate; mean groundwater-pumping rate, 1979-2015; and increasing demand groundwater-pumping rate (38 percent increase compared to 2015). The impact of these three scenarios upstream of Foss Reservoir at two gauges was a change in baseflow as follows: For

[207] USGS DRAFT Reach 1 August 2020 at p. 32 and Table 5 and Figure 15.

[208] Okla. Stat. Tit. 82 § 1020.4 (2011). In cooperation with OWRB, USGS has prepared a hydrological report for this review and update: USGS DRAFT Reach 1 August 2020.

[209] USGS DRAFT Reach 1 August 2020 at p. 4 and pp. 81-84.

the Cheyenne gauge, baseflow would decrease by 3.6% (2015 rate), 4.9% (1979-2015 mean rate) and 9.4% (increased rate); For the Hammond gauge, baseflow would decrease by 4.0% (2015 rate), 5.6% (1979-2015 mean rate) and 12.9% (increased rate).[210]

Based on this hydrological data, the author has the following comments:

Comment one. The EPS rate based on either a 20-year, a 40-year, or a 50-year basin life is very similar – 1.7 acre-feet per acre per year versus 1.6 and 1.6, respectively. The 20-year basin life EPS pumping rate of 1.7 acre-feet per year on every acre (considered full development) has the impact of depleting the Washita River alluvial aquifer by over fifty percent by the end of twenty years and causing the Foss Reservoir to go dry at the end of approximately seven years of full pumping at the 1.7 EPS. In the author's understanding, the 40-year and 50-year EPS appear also to mean that Foss Reservoir would likely go dry, at full development, long before its projected basin life ends in year 2060. Thus, these basin life EPS rates appear to be contradictory to the Water for 2060 Act that sets a conservation policy for water usage in the State of Oklahoma. Moreover, if OWRB adopted an EPS that seriously threatened the viability of Foss Reservoir, the state water law could well be in conflict with federal Reclamation law. Reclamation projects must abide by state water law for water rights. However, Reclamation projects are federal projects and state law cannot undermine the management of federal water projects.[211] Of course, full development[212] at these EPS rates greatly exceeds the present water

[210] USGS DRAFT Reach 1 August 2020 at pp. 84-86 and Tables 16 & 17.

[211] For discussion of the interplay between state water law for water rights and federal management of approved Reclamation projects, read Chapter 2 **Background Law**, FEDERAL LAW, Reclamation Law.

[212] Full development of the EPS in the aquifer could occur in at least two ways. Farmers could irrigate every acre overlying the aquifer; Overlying landowners could sell their groundwater EPS to other users (e.g. municipal or

usage from the Washita alluvial aquifer, which is in the range of 5,000 to 10,000 acre-feet per year of groundwater pumping.[213] The contrast between full development of an EPS rate and the actual groundwater usage only reinforces that education and conservation efforts are a high priority to encourage overlying landowners to refrain from fully developing the groundwater resource.

Comment two. USGS calculations about the impact of groundwater pumping rates at the 2015 rate or the 1979-2015 average rate reinforces the contrast between full development and the actual groundwater usage. If OWRB were to adopt a revised and updated EPS at the 2015 rate or the 1979-2015 average rate, the Washita alluvial aquifer would decline but by a relatively small amount. If the status-quo pumping of groundwater could be maintained, the Foss Reservoir would likely reach its expected reservoir life of 2060 without going dry.

Comment three. The USGS scenario of increasing groundwater use runs counter to the Oklahoma policy objective of using no more water in 2060 (and thereafter) than used in 2010 as set forth in the Water for 2060 Act. Thus, the-increasing-groundwater-use scenario appears to be a legally disfavored scenario if OWRB complies with the Water for 2060 Act.

Comment four. Recalling that OWRB has already determined an EPS of 2.0 acre-feet per acre per year for the Washita alluvial aquifer above Foss Reservoir, this fact has several implications. Presently existing groundwater permit holders in the Washita alluvial aquifer have

industrial users) who could either transport the aquifer water or withdraw the water at another location through a new well. *See e.g*., Okla. Admin. Rule 785:30-7 **Changes in Groundwater Rights** (2014).

[213] USGS DRAFT Reach 1 August 2020 at pp. 15-16 and Figure 6; and p. 32 and Table 5 and Figure 15.

a vested groundwater right that cannot be diminished.[214] The amount and size of the presently existing groundwater permits thus assuredly mean that if every present groundwater permit holder fully utilized their already granted vested groundwater permits, the Washita River would have significantly diminished base flow. As a result, inflows to the Foss Reservoir would also be greatly reduced. However, for those overlying landowners who apply after a 20-year review redetermines the MAY and EPA for the Washita alluvial aquifer, these permit applicants can only gain a groundwater permit in the amount of the redetermined EPS.[215]

c. Dry-year Option Leases to protect baseflow

Thinking in terms of water law management in western states, the Districts might consider alternative methods of protecting its water rights. For example, the Districts might consider an alternative transfer method commonly called a "dry-year option," meaning "A long-term lease agreement that maintains water in the original use in most years, but provides an intermittent water supply to other uses under preset conditions."[216]

Upstream of Foss Reservoir are 272 groundwater-right holders with permitted groundwater in the amount of 105,632.7 acre-feet per year.[217] Upstream from Fort Cobb Reservoir are 799 groundwater-right holders with permitted groundwater in the amount of 151,599 acre-feet per

[214] Okla. Stat. Tit. 82 § 1020.6(D) (2011).

[215] Okla. Stat. Tit. 82 § 1020.6(D) (2018) (reflects statutory amendment enacted in 2018).

[216] EDF Alternatives at p. 13, Table 1 (classifies dry-year options as an "interruptible water supply agreement.")

[217] OWRB, Foss Reservoir Summary Fact Sheet (no date), available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43 .

year.[218] The District could think of dry-year option leases but might conclude that dry-year options leases with such a large number of groundwater-right holders are not a viable approach because of the transaction costs of negotiating, managing and enforcing these leases with such a large number of groundwater permit holders;[219] the cost of leasing a sufficient number of acres to provide protection to the baseflows of the Washita River and Cobb, Lake and Willow Creeks and the storage in the reservoirs; and the hydrological uncertainties associated with taking options in any acreage less than all acreage covered by groundwater permits.

In April 2020, as part of the ongoing Upper Washita River Basin Study, USGS prepared a scope of work to ascertain the impact of groundwater pumping upon baseflow from specific, identified wells based on their geographical proximity to Cobb Creek, Lake Creek and Willow Creek – the three streams that flow into Fort Cobb Reservoir.[220] Depending on the results of this proposed study, the Fort Cobb RMCD might have the ability to identify a manageable number of landowners with whom to negotiate dry-year leases and sufficient confidence that these dry-year leases would increase the amount of water in storage in Fort Cobb Reservoir. Fort Cobb RMCD would be looking for groundwater wells within "proximity zones" that clearly affect the baseflow from the Rush Springs aquifer and the alluvial aquifers of the three creeks into the reservoir.

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[218] OWRB, Fort Cobb Reservoir Summary Fact Sheet (no date), available at http://owrb.maps.arcgis.com/apps/webappviewer/index.html?id=db6e61cfdbc74a4d8b919b2eceef8d43

[219] In 2019, the Oklahoma Legislature passed legislation allowing the creation of "Groundwater Irrigation Districts." Okla. Stat. Tit. §§ 1021.1-1021.7 (eff. Nov. 1, 2019). If a Groundwater Irrigation District were to come into existence in the Foss and Fort Cobb reservoir basins, the Districts may have reduced transaction costs by dealing with the Groundwater Irrigation District rather than the individual groundwater permit holders.

[220] USGS RSAquifer Simulated Effects 2020, especially Scenarios C and D at pp. 16-17.

Depending on the outcome of the USGS study on groundwater wells upstream of Fort Cobb Reservoir, consideration could be given towards undertaking a similar study on the groundwater wells upstream from Foss Reservoir. Or, possibly, the results from the Fort Cobb study might be sufficiently robust as to be applied to Foss Reservoir also.

V. RED RIVER COMPACT

The Red River Compact[221] has two provisions directly relevant to the Washita River and its Reclamation reservoirs. These provisions read as follows:

> Section 4.01. Subbasin 1 – Interstate streams – Texas. (a) This includes the Texas portion of … Washita River, together with all their tributaries in Texas which lie west of the 100th Meridian. (b) The annual flow within this subbasin is hereby apportioned sixty percent (60%) to Texas and forty percent (40%) to Oklahoma.
>
> Section 4.02. Subbasin 2 – Intrastate and interstate streams – Oklahoma. (a) This subbasin is comprised of all tributaries of the Red River in Oklahoma and portions thereof upstream to the Texas-Oklahoma state boundary at longitude one hundred degrees west, beginning from Denison Dam [Lake Texhoma] and upstream … (b) The State of Oklahoma shall have free and unrestricted use of the water of this subbasin."

Under Section 4.01, Texas has a claim to sixty percent of the waters in the headwaters of the Washita River (and its Texas tributaries) from where it arises near Miami, Texas to the Texas-Oklahoma state boundary – a distance of approximately 40 miles. As far as the author knows, Texas has made no efforts or plans to capture these headwaters. Hence, Texas is not taking Washita River water that presently flows into Foss Reservoir.

In accord with Section 4.02, once the Washita River enters Oklahoma until it flows into Lake Texhoma at Denison Dam, Oklahoma has free and unrestricted use of the water in the Washita

[221] The Red River Compact is set forth at Okla. Stat. Tit. 82 §§ 1431-1432 (2011).

River and its intrastate tributaries.

As a consequence of these provisions, the Red River Compact does not appear to pose a threat to the water supply or the water rights of Foss Reservoir or Fort Cobb Reservoir.

VI. TRIBAL JURISDICTION

In the case of *McGirt v. Oklahoma*,[222] the Supreme Court of the United States ruled that the Creek Nation Reservation of 1866 exists today and has not been diminished or disestablished. In light of this Supreme Court decision, the Creek Nation is a sovereign over the natural resources, including water, within the reservation boundaries.

The Creek Nation is in eastern Oklahoma. The Fort Cobb Reservoir and the Foss Reservoir are in western Oklahoma and are not within the boundaries of the Creek Reservation of 1866. However, the implication presented by the *McGirt* decision is that tribal reservations might continue to exist in western Oklahoma. Thus the question for this Chapter: Does a non-diminished and non-disestablished reservation exist that encompassed the catchment basis of the Fort Cobb Reservoir or the Foss Reservoir?

Foss Reservoir itself dams the upper Washita River in Custer County, Oklahoma. The Oklahoma tributaries of the upper Washita flowing into Foss Reservoir all exist within either Roger Mills County or Custer County, Oklahoma. These two Oklahoma counties sit within the original reservation boundaries of the Cheyenne and Arapaho Reservation.[223]

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[222] *McGirt v. Oklahoma*, ___ U.S. ___, 140 S.Ct. 2452 (2020). *See also*, *Sharp v. Murphy*, ___ U.S. ___, 140 S.Ct. 2412 (2020) (a companion case to *McGirt*.)

[223] C. Goins & D. Goble, HISTORICAL ATLAS OF OKLAHOMA (2006) at p. 13 (major lakes of Oklahoma), p. 129 (Map of the Cheyenne and Arapaho Reservation), and p. 203 (Map of Southwestern Oklahoma). [hereafter Historical Atlas].

In *Ellis v. Page*,[224] the Tenth Circuit Court of Appeals faced a factual pattern identical to the *McGirt* factual pattern, except the crime (murder) took place within the boundaries of the original Cheyenne and Arapaho Reservation. In affirming that the State of Oklahoma had criminal jurisdiction of the crime, the Tenth Circuit wrote:

> While the words of alienation employed in the treaties do not formally disestablish the reservations,[225] we think that they have the unequivocal effect of doing so. In treaty parlance they are as appropriate to disestablish the reservations as the Congressional words "vacate and restore" employed in the 1892 Act to disestablish a portion of the Colville reservation.[226]

The Tenth Circuit ruled that the original Cheyenne and Arapaho Reservation no longer exists. Thus, it appears to this author that the Cheyenne and Arapaho Nations would not have jurisdiction over Foss Reservoir and its Oklahoma tributaries within the original boundaries of their Reservation.[227]

The author expresses trepidation in concluding that the Cheyenne and Arapaho Reservation no longer exists: the *Ellis v. Page* opinion is from the Tenth Circuit Court of Appeals, not the Supreme Court of the United States; the Tenth Circuit opinion predates Supreme Court jurisprudence that has been stricter in finding disestablishment;[228] and the Supreme Court could overrule this Tenth Circuit opinion in light of *McGirt v. Oklahoma*. Thus, the author thinks that future litigation could arise challenging the Tenth Circuit opinion finding

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[224] 351 F.2d 250 (10th Cir. 1965).

[225] The Tenth Circuit was referring to the Cheyenne and Arapaho Reservation and the Comanche, Kiowa, Apache Reservation.

[226] *Ellis v. Page* at p. 252.

[227] For a brief discussion of the history of the Cheyenne and Arapaho Reservation, read Historical Atlas at p. 128 ("Opening of the Cheyenne and Arapaho Reservation").

[228] *See e.g., Solem v. Bartlett*, 465 U.S. 463 (1984).

that the Cheyenne and Arapaho Reservation was disestablished and no longer exists.

The Fort Cobb Reservoir dams three streams tributary to the Washita River in Caddo County, Oklahoma. Caddo County exists within the boundaries of the original reservation of the Wichita and Caddo Nations. These Fort Cobb Reservoir catchment basins are entirely within the boundaries of the original reservation of the Wichita and Caddo Nations.

The author could find no legal authority (case law or statute) that has addressed whether the Wichita and Caddo Reservation has been disestablished or diminished. Thus, the author concludes that future litigation or express federal congressional action will be necessary to resolve whether or not the Wichita and Caddo Nations have sovereignty over waters within the boundaries of their original reservation. The author does not speculate as to the impact upon the water rights and water storage of Fort Cobb RMCD if the Wichita and Caddo Nations have sovereignty over waters within the original reservation boundaries.

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CHAPTER SIX: OBSERVATIONS AND CONCLUSIONS

In this final chapter of the legal review of the water rights of the four western-most Reclamation reservoirs in Oklahoma, the author divides the chapter into two parts – Observations and Conclusions.

Observations are meant to reflect the author's summary views on the most significant legal issues raised and discussed in the prior substantive chapters of Chapters 2, 3, 4 & 5. The author uses the term "observations" to signal to the reader that the author understands that others – particularly the five study partners – may reach different observations about those legal issues. In other words, the author has confidence in his observations as informed and correct; the author stands ready to defend his observations based on the documents that he has read. However, the author does not insist that he has found "the answer" or "the interpretation" or "the understanding" about those issues. Others may make concurring observations, slightly different observations, or maybe (and hopefully not too often) completely different observations.

For conclusions, the author sets forth brief comments that he considers important (and often overlooked) regarding the water rights and water management of the four reservoirs upon which this legal review focuses.

OBSERVATIONS

Regarding Chapter 2 on Background Law, the author has the following observations:

When the author undertook this legal review, the author anticipated that one issue that might be of importance was possible conflict between the federal law, most importantly the Reclamation Act of 1902 and its amendments, and Oklahoma water law. The author thought that

he might have to choose between conflicting federal and state laws as the law governing the four reservoirs. Except for one potential conflict, to be discussed later in these observations [1], the author has not found a "conflict" scenario to exist. Rather, the author has learned that Reclamation Law and Oklahoma water law have tensions and that these tensions have at times given rise to disagreements among the study partners, but that overall federal law and Oklahoma law are compatible. Those with legal and managerial authority over the four reservoirs do not need to make a choice between applying federal law or state law. Those with authority can comply with both federal and state law without violating or undermining either federal or state law relevant to the four reservoirs.

While federal and state law are compatible, there is jurisdictional uncertainty about Tribal Nation jurisdiction and State of Oklahoma jurisdiction. In the 2020 decision of *McGirt v. Oklahoma*,[2] the Supreme Court of the United States recognized the existence of large reservations in eastern Oklahoma. By implication, the legal question now exists as to whether Tribal Nations (Cheyenne-Arapaho Nations, Kiowa-Comanche-Apache Nations, Wichita-Caddo Nations) in western Oklahoma continue to have large reservations with jurisdiction over the lands and waters within those reservation boundaries. The resolution of this jurisdictional question depends upon future litigation and legislation that is well beyond the mandate of this legal review focused on the water rights of the four reservoirs. However, the study partners

[1] Read the observation about Oklahoma groundwater law and its potential impact on the viability of reservoir storage. The author emphasizes that this is a potential conflict, not an actual conflict (or maybe better phrased, express conflict) between the provisions of federal law and state water law.

[2] *McGirt v. Oklahoma*, ___ U.S. ____. 140 S.Ct. 2452 (2020). *See also, Sharp v. Murphy*, ___ U.S. ____, 140 S. Ct. 2412 (2020).

should be aware of this jurisdiction uncertainty.

Western Water law is somewhat informative for understanding and protecting the water rights of the four reservoirs. Oklahoma does primarily follow the prior appropriation system of stream water law and its principles, just as is true of the stream water law of the seventeen western states from the Central Plains to the Pacific. However, to a much greater extent, western water law does not comfortably fit with Oklahoma water law. Oklahoma legislation and case law does not recognize significant principles many western states have adopted in their prior appropriation water law systems – e.g. instream flows, express conjunctive management between stream water and groundwater law, public interest in permitting decisions, and the public trust doctrine. In addition, Oklahoma groundwater law is a *sui generis* system of groundwater owned by the overlying landowner and allocated on an equal proportionate share per acre to each overlying landowner. Hence, Oklahoma's unique groundwater law does not share a common set of governing principles with the groundwater laws of the other sixteen western states.

Regarding Chapters 3, 4, & 5 focusing on the water rights of each of the four western-most Reclamation reservoirs in Oklahoma, the author has the following observations:

Each of the four reservoirs – Foss Reservoir, Fort Cobb Reservoir, W. C. Austin Reservoir, and Tom Steed Reservoir – carry a stream water permit from the Oklahoma Water Resources Board (OWRB) for water in storage. Foss Reservoir Master Conservancy District (Foss RMCD), Fort Cobb Reservoir Master Conservancy District (Fort Cobb RMCD), Mountain Park Master Conservancy District (MPMCD) and Lugert-Altus Irrigation District (LAID) [collectively Districts] are the legal holders of these OWRB stream water permits for their

respective reservoirs. Despite the existence of these stream water permits, the study partners have continuously had disagreements about the permitted amount of storage water and the permit terms. While the disagreements have been broad ranging, two persistent issues appear to be at the core of these disagreements.

First, there are disagreements about evaporation losses from each reservoir -- which are substantial in amount. How should the OWRB account for evaporation losses? Should these losses be counted as part of the permitted amount of water granted to the Districts? Or, should the losses be accounted only after the Districts (the holders of the water permit) claim interference by other stream water users?

Second, there are the disagreements about the quantity of water to which the Districts are lawfully entitled to claim in terms of authorized uses. The federal legislation authorizing these reservoirs specifies uses for the Districts that are beyond those for irrigation, municipal and industrial uses. More precisely, the authorizing legislation usually grants the District legal authority for water for conservation, recreation and wildlife uses (purposes). Should OWRB recognize these conservation, recreation and wildlife uses as beneficial uses of water? Should OWRB recognize these conservation, recreation and wildlife uses in the amount of water granted in the stream water permits – probably through a process of quantification of the amount of water needed for conservation, recreation and wildlife uses?

If OWRB recognized evaporation losses and quantified conservation, recreation, and wildlife uses in the stream water permits of the Districts, the Districts' stream water permits would show substantially greater amounts of permitted stream water rights for reservoir storage

than OWRB permits presently state. If the Districts had substantially greater permitted stream water rights, the study partners would also likely alter their conceptual understanding of how much water remains in a stream that is available for other junior stream water permits and would abandon their focus (and disputes) about the definition and meaning of "firm yield" for each reservoir. The concept of "firm yield" would be seen to relate to guaranteeing that the Districts can meet their consumptive water uses and contractual water supply agreements -- that is, the irrigation, municipal, and industrial consumptive uses of water. The concept of "firm yield" would be seen to be unrelated to the Districts non-consumptive uses of water, that is for conservation, recreation, and wildlife uses.

By clarifying the amount of water to which each District is entitled in its stream water permit, the author also thinks that the study partners would clarify and better understand the distinction between a District's stream water permit and the District's management of stored water for the benefit of other potential claimants within the Oklahoma prior appropriation system. Oklahoma water law has not carefully developed, for Reclamation reservoirs, the distinction between permitted water rights and water in storage in the Reservoirs for which the Districts have fiduciary obligations to other potential claimants of stream water for beneficial purposes.

The study partners have also had disputes about the concept of interference between senior and junior water right holders within Oklahoma's prior appropriation stream water system. "First in time is first in right" is a foundational concept within the prior appropriation system of water law. Yet, Oklahoma water law, in statutes, case decisions or regulations, has

rarely and barely addressed the concept of interference. Without a functioning administrative structure to protect senior water rights from interference by junior water rights,[3] seniors are without recourse during times of water shortage. Oklahoma and the study partners in particular need to develop and implement a functioning administrative procedure for protecting senior water rights from interference by junior stream water rights. With the data and models developed through the hydrological studies on the streams and aquifers of the Upper Washita River Basin and the Upper Red River Basin, the author has confidence that the study partners can identify and adopt precise, clear thresholds that trigger a "call of the river" for the four Reclamation Reservoirs.[4] The Districts hold (not all, but by far) the largest amount of senior stream water rights within their catchment basins. Under Oklahoma stream water law, the Districts are legally entitled to protection of their senior stream water rights and should have access to an effective and efficient remedy to enforce their senior stream water rights.

The Districts are legal entities that can apply for water rights just like any other legal person in the State of Oklahoma. The Districts could apply for additional water rights – above and beyond those water rights for which the Districts have already gained permits or for which the Districts have already sought clarification. If the Districts sought additional water rights for

[3] These junior water rights could be permanent water rights (regular permits) or temporary water rights (provisional permits).

[4] In this regard, the author notes that as this Chapter Six arrived at Reclamation in January 2021, Reclamation and OWRB came to a consensus on a range of thresholds, corresponding methods, and statistical analysis that could be tested as a possible trigger for a call of the river for the Tom Steed Reservoir Hydrologic Basin. Bureau of Reclamation and OWRB, Upper Red River Basin Study: Formulation of Curtailment Alternatives for the Tom Steed Reservoir Hydrologic Basin (DRAFT January 2021).

Reclamation and OWRB also have agreed to seek a similar consensus in the Lugert-Altus Hydrologic Basin for the W.C. Austin Reservoir.

all "unappropriated stream water" within their catchment basins and if OWRB granted these additional water rights, the Districts would protect themselves from additional junior stream water right holders from coming into existence. In addition, the Districts would change storage water in the reservoirs into "permitted" stream water rights held by the Districts. By applying for and gaining additional water rights, Districts would protect their existing permitted stream water rights and would greatly enhance their legal control of the waters within the reservoirs. With greater legal control of the waters in the reservoirs, the Districts would enhance managerial flexibility in their day-to-day operations, especially as droughts begin and begin to bite.

The author holds the perspective that the Districts do not have a legitimate claim to a water right to the "top of the conservation pool" of each reservoir. But the author also observes that if the study partners can clarify the Districts' water rights regarding evaporation and conservation-recreation-wildlife uses and if the Districts apply for and obtain additional water rights to all "unappropriated stream water" within their catchment basins, the Districts functionally and practically gain control of the waters stored in the reservoirs to the conservation pool capacity of the reservoirs.

In its body of water law, Oklahoma does not recognize conjunctive management of stream water and groundwater. Stream water is governed by the stream water use code;[5] groundwater is governed by the groundwater law.[6] The stream water use code and the groundwater law are separate and distinct water law regimes. OWRB correctly and properly

[5] Okla. Stat. Tit. 82 §§ 105.1 through 105.33 (2011).

[6] Okla. Stat. Tit. 82 §§ 1020.1 through 1020.22 (2011).

administers stream water and groundwater as separate and distinct.[7]

Even though stream water and groundwater are distinct bodies of law, separately administered, the author observes that OWRB should not ignore that stream water and groundwater are physically interconnected bodies of water. Indeed, the author observes that OWRB has the authority to consider and to take into account the interconnection between stream water and groundwater through two legal mechanisms. First, under the groundwater law, OWRB has the responsibility for determining the Maximum Annual Yield (MAY) of an aquifer and then for allocating that MAY to the owners of land overlying the aquifer in an equal proportionate share (EPS) per acre of land. In this process, OWRB has some statutory flexibility to consider and account for the interconnection between stream water and groundwater. Second, OWRB operates under the Water for 2060 Act[8] in which the Oklahoma Legislature set a public policy of establishing and working toward a goal of consuming no more fresh water in the year 2060 than is consumed statewide in the year 2012. To achieve this public policy goal, OWRB has the flexibility to consider the interconnection between stream water and groundwater. The study partners should work together to assure that OWRB uses its statutory flexibility to consider and to account for the physical interconnection between stream water and groundwater so as to protect the water rights and the water supply reliability of the four Reclamation reservoirs. More precisely, the study partners should cooperate to adopt a conservation policy for groundwater use that informs and guides OWRB's governance of groundwater law.

[7] OWRB derives its power and authority primarily from Okla. Stat. Tit. 82 §§ 1084.1 through 1086.6 (2011).

[8] Okla. Stat. Tit. 82 § 1088.12 (2013 Supp.)

Depending on OWRB decisions about groundwater, it is here that a potential conflict exists between federal Reclamation law and Oklahoma water law.[9] This potential conflict exists because OWRB decisions about groundwater usage could seriously threaten the viability of water storage in the four Reclamation reservoirs. Viability would be seriously threatened if OWRB decisions on groundwater excessively deprived the streams and rivers, in the catchment basins of the four reservoirs, of base flow coming from groundwater. The author believes that this potential conflict need not become an actual conflict if the study partners cooperate to adopt a conservation policy for groundwater use that takes into account the interconnectedness of stream water and groundwater.

In the author's observation, maximum exploitation of authorized groundwater within the catchment basins of the four reservoirs is as great a threat to the Districts' water rights and water supply as demands and conflicts arising from stream water permits. While adopting a conservation policy as a legal strategy for groundwater is important, an equally important strategy is for the study partners to cooperate in educational and other efforts to assist landowners to use groundwater efficiently and to embrace groundwater conservation for their lands. Present actual groundwater usage is far below maximum exploitation of authorized groundwater. At the present level of groundwater use, the Districts' water rights and water supply are likely precariously protected. Hence, the study partners should cooperate to assure that groundwater usage stays far below maximum exploitation. The study partners should adopt

[9] This is the potential conflict referred to in fn. 1 of this chapter. For fuller discussion of this potential conflict, read Chapter 2, fns. 11-13 and accompanying text. *See also*, Chapter 3, fn. 147, Chapter 4, fn. 140, and Chapter 5, fn. 183 and fn. 213 and the text accompanying those footnotes.

and implement the (reworded) state goal of consuming no more fresh groundwater in the year 2060 than is consumed within the Reservoirs' catchment basins in the year 2012.

In addition to considerations of the physical interconnectedness of stream water and groundwater, and cooperation in educational and other efforts to promote groundwater conservation by landowners, the Districts also have a legal avenue, drawn from Western water law, to protect their water supply. Districts might consider the effectiveness, cost, and managerial obligations of dry-year option leases. As explained in Chapters 3, 4 & 5, dry-year option leases might be a reasonable and sensible legal strategy to protect water supply through voluntary contracts between a District and catchment basin landowners who agree to cease taking allocated groundwater under specified pre-set circumstances. The key to this dry-year option legal strategy is Districts having hydrological data showing that using the legal strategy would result, in fact, in additional water flowing into the District's reservoir. The Districts want "wet" water in their reservoirs, not "paper" water in the leases.

CONCLUSIONS

Water laws allocate water between competing claimants desiring to use the available water. But water laws do not create physical water (wet water). From the author's study of the water rights and water supply of the four western-most Reclamation reservoirs in Oklahoma, the technical data from the hydrological studies appears to indicate that a drought lasting more than five years will parch the reservoirs dry. When the reservoirs are dry, water law has no ability to protect the Reservoirs' water supply. The only protection for the Reservoirs' water supply in an extended drought is for the drought to end. Rain or snow produces wet water -- not water laws,

cases, or regulations. In an extended drought, nature, not King Canute, governs the fate of the Reservoirs' water supply.

In light of the uncertainty about the length and severity of future droughts, the study partners and the citizens of western Oklahoma must not look upon water law as the invincible solution to water supply issues. The study partners are prudent to think about and plan for extended droughts occurring beyond the estimated 50- to 100-year recorded period by which firm yield calculations are currently made. (Estimated 100-year lifespans for the four reservoirs: W.C. Austin, 2047; Fort Cobb, 2059; Foss, 2061; Tom Steed, 2075).[10] Then, solutions (if any) to an extended drought more likely will be found in land use patterns, demographics, conservation, education, alternate water supplies, and human behavior generally. The Districts and their Reservoirs are wonderful, valuable resources for western Oklahoma but they are ultimately ruled not by water law, but by nature.

[10] Estimated lifespans are for management and planning purposes. Estimated lifespans do not mean or imply that these four reservoirs will be inoperable or unusable at the end of the estimate lifespans.

RESEARCH MATERIALS

The research materials that Drew L. Kershen used in preparing and writing this Legal Review will be stored in the Library/Archives of the Oklahoma-Texas Area Office of the Bureau of Reclamation in Oklahoma City, Oklahoma.