APPENDIX A

Agency Correspondence

THE HOPI TRIBE

Leroy Shingoitewa
CHAIRMAN

Herman G. Honanie
VICE-CHAIRMAN

March 9, 2010

John McGlothlen
Attention: Bruce D. Ellis, Chief, Environmental Resource Management Division
Bureau of Reclamation, Phoenix Area Office
6150 West Thunderbird Road
Glendale, Arizona 85306-4001

Re: Phase 1 Rehabilitation of San Carlos Irrigation Project

Dear Mr. McGlothlin,

This letter is in response to a memorandum and enclosed Scoping Information and Opportunity to Comment dated February 17, 2010, regarding the San Carlos Irrigation and Drainage District proposal to repair the Ashurst-Hayden Diversion Dam and construct a sediment removal and storage facility adjacent to the Florence-Casa Grande Canal. The Hopi Tribe claims cultural affiliation to prehistoric cultural groups in Arizona, including the Hohokam prehistoric cultural group in southern Arizona, and the Hopi Cultural Preservation Office supports the identification and avoidance of prehistoric archaeological sites and Traditional Cultural Properties. Therefore, we appreciate your continuing solicitation our input and your efforts to address our concerns.

The Hopi Tribe considers the prehistoric archaeological sites of our ancestors to be Traditional Cultural Properties. We understand effects to cultural resources will be addressed in the environmental assessment. If the cultural resources survey of the area of potential effect identifies prehistoric sites that will be adversely affected by project activities, please provide us with copies of the survey report and any proposed draft treatment plan for review and comment. In addition, we recommend that if any cultural features or deposits are encountered during project activities, these activities must be discontinued in the immediate area of the remains, and the State Historic Preservation Office must be consulted to evaluate their nature and significance. If any Native American human remains or funerary objects are discovered during construction they shall be immediately reported as required by law.

Should you have any questions or need additional information, please contact Terry Morgart at the Hopi Cultural Preservation Office. Thank you again for your consideration.

Respectfully,

Leigh J. Kuwanwisiwma, Director
Hopi Cultural Preservation Office

xc: Arizona State Historic Preservation Office

P.O. BOX 123 KYKOTSMOVI, AZ 86039 (928) 734-3000

Janice K. Brewer
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
(602) 771-2300 • www.azdeq.gov

March 2, 2010

Mr. John McGlothlen
U.S. Department of the Interior
Bureau of Reclamation
Phoenix Area Office
6150 West Thunderbird Road
Glendale, AZ 85306-4001

Re: Pinal County: EA Preparation on Phase I Rehabilitation of San Carlos Irrigation Project Facilities (PXAO-1500 ENV-7.00)

Dear Mr. McGlothlen:

The Air Quality Division has reviewed the scoping notice described in your letter, dated February 17, 2010, that was submitted for our comments. While the proposed project is not currently located in a nonattainment or maintenance area for air pollutants, there is a pending 10-micron particulate matter (PM10) nonattainment designation for Pinal County and PM10 air pollution, during construction, could contribute to that area. The planning area boundary is not yet final.

Considering the large area in which the proposed work is to be performed and prevailing winds, to comply with other applicable air pollution control requirements and minimize adverse impacts on public health and welfare, the following information is provided for your consideration:

REDUCE DISTURBANCE of PARTICULATE MATTER during CONSTRUCTION

This action, plan or activity may temporarily increase ambient particulate matter (dust) levels. Particulate matter 10 microns in size and smaller can penetrate the lungs of human beings and animals and is subject to a National Ambient Air Quality Standard (NAAQS) to protect public health and welfare. Particulate matter 2.5 microns in size and smaller is difficult for lungs to expel and has been linked to increases in death rates; heart attacks by disturbing heart rhythms and increasing plaque and clotting; respiratory infections; asthma attacks and cardiopulmonary obstructive disease (COPD) aggravation. It is also subject to a NAAQS.

The following measures are recommended to reduce disturbance of particulate matter, including emissions caused by strong winds as well as machinery and trucks tracking soil off the construction site:

I. Site Preparation and Construction

A. Minimize land disturbance;
B. Suppress dust on traveled paths which are not paved through wetting, use of watering trucks, chemical dust suppressants, or other reasonable precautions to prevent dust entering ambient air
C. Cover trucks when hauling soil;
D. Minimize soil track-out by washing or cleaning truck wheels before leaving construction site;
E. Stabilize the surface of soil piles; and
F. Create windbreaks

II. Site Restoration
A. Revegetate any disturbed land not used;
B. Remove unused material; and
C. Remove soil piles via covered trucks.

The following rules applicable to reducing dust during construction, demolition and earth moving activities are enclosed:

- Arizona Administrative Code R18-2-604 through -607
- Arizona Administrative Code R18-2-804
- Pinal County Code Chapter 4

Should you have further questions, please contact me at (602) 771-2375 or David Biddle, of the Planning Section Staff, at (602) 771-2376.

Sincerely,

Diane L. Arnst, Manager
Air Quality Planning Section

Enclosures

Cc: Bret Parke, EV Administrative Counsel
David A. Biddle, Environmental Program Specialist
File No. 230485

c. If the burning would occur at a solid waste facility in violation of 40 CFR 258.24 and the Director has not issued a variance under A.R.S. § 49-763.01.

E. Open outdoor fires of dangerous material. A fire set for the disposal of a dangerous material is allowed by the provisions of this Section, when the material is too dangerous to store and transport, and the Director has issued a permit for the fire. A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). The Director shall permit fires for the disposal of dangerous materials only when no safe alternative method of disposal exists, and burning the materials does not result in the emission of hazardous or toxic substances either directly or as a product of combustion in amounts that will endanger health or safety.

F. Open outdoor fires of household waste. An open outdoor fire for the disposal of household waste is allowed by provisions of this Section when permitted in writing by the Director or a delegated authority. A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). The permittee shall conduct open outdoor fires of household waste in an approved waste burner and shall either:

1. Burn household waste generated on-site on farms or ranches of 40 acres or more where no household waste collection or disposal service is available; or
2. Burn household waste generated on-site where no household waste collection and disposal service is available and where the nearest other dwelling unit is at least 500 feet away.

G. Permits issued by a delegated authority. The Director may delegate authority for the issuance of open burning permits to a county, city, town, air pollution control district, or fire district. A delegated authority may not issue a permit for its own open burning activity. The Director shall not delegate authority to issue permits to burn dangerous material under subsection (E). A county, city, town, air pollution control district, or fire district with delegated authority from the Director may assign that authority to one or more private fire protection service providers that perform fire protection services within the county, city, town, air pollution control district, or fire district. A private fire protection provider shall not directly or indirectly condition the issuance of open burning permits on the applicant being a customer. Permits issued under this subsection shall comply with the requirements in subsection (D)(3) and be in a format prescribed by the Director. Each delegated authority shall:

1. Maintain a copy of each permit issued for the previous five years available for inspection by the Director;
2. For each permit currently issued, have a means of contacting the person authorized by the permit to set an open fire if an order to extinguish open burning is issued; and
3. Annually submit to the Director by May 15 a record of daily burn activity, excluding household waste burn permits, on a form provided by the Director for the previous calendar year containing the information required in subsections (D)(3)(e) and (D)(3)(f).

H. The Director shall hold an annual public meeting for interested parties to review operations of the open outdoor fire program and discuss emission reduction techniques.

I. Nothing in this Section is intended to permit any practice that is a violation of any statute, ordinance, rule, or regulation.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Correction, subsection (C) repealed effective October 2, 1979, not shown (Supp. 80-1). Former Section R9-3-602 renumbered without change as Section R18-2-602 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-602 renumbered to R18-2-802, new Section R18-2-602 renumbered from R18-2-401 effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-603. Repealed

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-603 renumbered without change as Section R18-2-603 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-603 renumbered to R18-2-803, new Section R18-2-603 renumbered from R18-2-403 effective November 15, 1993 (Supp. 93-4). Repealed effective October 8, 1996 (Supp. 96-4).

R18-2-604. Open Areas, Dry Washes, or Riverbeds

A. No person shall cause, suffer, allow, or permit a building or its appurtenances, or a building or subdivision site, or a driveway, or a parking area, or a vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, without taking reasonable precautions to limit excessive amounts of particulate matter from becoming airborne. Dust and other types of air contaminants shall be kept to a minimum by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means.

B. No person shall cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, trucks, cars, cycles, bikes, or buggies, or by animals such as horses, without taking reasonable precautions to limit excessive amounts of particulates from becoming airborne. Dust shall be kept to a minimum by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means.

C. No person shall operate a motor vehicle for recreational purposes in a dry wash, riverbed or open area in such a way as to cause or contribute to visible dust emissions which then cross property lines into a residential, recreational, institutional, educational, retail sales, hotel or business premises. For purposes of this subsection "motor vehicles" shall include, but not be limited to trucks, cars, cycles, bikes, buggies and 3-wheelers. Any person who violates the provisions of this subsection shall be subject to prosecution under A.R.S. § 49-463.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-604 renumbered without change as Section R18-2-604 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-604 renumbered to R18-2-804, new Section R18-2-604 renumbered from R18-2-404 and amended effective November 15, 1993 (Supp. 93-4).

ARTICLE 8. EMISSIONS FROM MOBILE SOURCES (NEW AND EXISTING)

R18-2-801. Classification of Mobile Sources

A. This Article is applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations.

B. Unless otherwise specified, no mobile source shall emit smoke or dust the opacity of which exceeds 40%.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Amended effective February 3, 1993 (Supp. 93-1). Former Section R18-2-801 renumbered to Section R18-2-901, new Section R18-2-801 renumbered from R18-2-601 effective November 15, 1993 (Supp. 93-4).

R18-2-802. Off-road Machinery

A. No person shall cause, allow or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

B. Off-road machinery shall include trucks, graders, scrapers, rollers, locomotives and other construction and mining machinery not normally driven on a completed public roadway.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-802 renumbered to Section R18-2-902, new Section R18-2-802 renumbered from R18-2-602 effective November 15, 1993 (Supp. 93-4).

R18-2-803. Heater-planer Units

No person shall cause, allow or permit to be emitted into the atmosphere from any heater-planer operated for the purpose of reconstructing asphalt pavements smoke the opacity of which exceeds 20%. However three minutes' upset time in any one hour shall not constitute a violation of this Section.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-803 renumbered to Section R18-2-903, new Section R18-2-803 renumbered from R18-2-603 effective November 15, 1993 (Supp. 93-4).

R18-2-804. Roadway and Site Cleaning Machinery

A. No person shall cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

B. In addition to complying with subsection (A), no person shall cause, allow or permit the cleaning of any site, roadway, or alley without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions may include applying dust suppressants. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Amended effective February 3, 1993 (Supp. 93-1). Former Section R18-2-804 renumbered to Section R18-2-904, new Section R18-2-804 renumbered from R18-2-604 effective November 15, 1993 (Supp. 93-4).

R18-2-805. Asphalt or Tar Kettles

A. No person shall cause, allow or permit to be emitted into the atmosphere from any asphalt or tar kettle smoke for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%.

B. In addition to complying with subsection (A), no person shall cause, allow or permit the operation of an asphalt or tar kettle without minimizing air contaminant emissions by utilizing all of the following control measures:

1. The control of temperature recommended by the asphalt or tar manufacturer;
2. The operation of the kettle with lid closed except when charging;
3. The pumping of asphalt from the kettle or the drawing of asphalt through cocks with no dipping;
4. The dipping of tar in an approved manner;
5. The maintaining of the kettle in clean, properly adjusted, and good operating condition;
6. The firing of the kettle with liquid petroleum gas or other fuels acceptable to the Director.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-805 renumbered to Section R18-2-905, new Section R18-2-805 renumbered from R18-2-605 effective November 15, 1993 (Supp. 93-4).

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Janice K. Brewer
Governor

Benjamin H. Grumbles
Director

March 15, 2010

Mr. John McGlothlen
U.S. Department of Interior
Bureau of Reclamation
6150 W. Thunderbird
Glendale, AZ 85306-4001

SENT VIA E-MAIL: jmcglothlen@usbr.gov

Re: Scoping Notice on Environmental Assessment for San Carlos Irrigation and Drainage District

Dear Mr. McGlothlen:

Thank you for the February 17, 2010 Scoping Notice on the Environmental Assessment for the irrigation system rehabilitation project proposed for the San Carlos Irrigation and Drainage District. The Arizona Department of Environmental Quality, Water Quality Division is responsible for ensuring the delivery of safe drinking water to customers of regulated public water systems under the Safe Drinking Water Act, permits for proposed discharges to surface waters of the United States under the federal Clean Water Act, permits under the State Aquifer Protection Permit program and water quality certifications of certain federal licenses and permits. As the proposed project involves sediment removal and storage facility, our only comment is to suggest that the project have in place structural barriers or best management practices to prevent any dewatering of the removed sediment from discharging into the Gila River.

We appreciate the opportunity to review and provide comments. If you need further information, please contact Wendy LeStarge of my staff at (602) 771-4836 or via e-mail at wl1@azdeq.gov, or myself at (602) 771-4416 or via e-mail at lc1@azdeq.gov.

Sincerely,

Linda Taunt, Deputy Director
Water Quality Division

TriValleyCentral.com
Pinal County's Information Source

Diversion Dam eyed for repairs

Print Page

Staff Reports

Published: Thursday, February 25, 2010 8:44 AM MST

San Carlos Irrigation and Drainage District is proposing repair of Ashurst-Hayden Diversion Dam, according to the U.S. Bureau of Reclamation which will fund the work. The public is invited to submit comments on the dam's environmental impacts.

The 88-year-old dam near Florence diverts Gila River water into a system of irrigation canals which serve lands within the San Carlos Irrigation and Drainage District and the Gila River Indian Community.

The dam has not had major repairs since it was built. Today it is showing surface deterioration of the concrete and a number of the gates no longer function, according to John McGlothlen, an environmental protection specialist with the Bureau of Reclamation.

In accordance with Title II of the Arizona Water Settlements Act, the Bureau of Reclamation will do an environmental assessment (EA) of the proposed project. Input from the public is desired to highlight environmental impacts and other key issues, and possible alternatives, to the project that should be considered in the EA.

Comments should be mailed to John McGlothlen at the U.S. Bureau of Reclamation, PXAO-1500, 6150 W. Thunderbird Road, Glendale, AZ 85306-4001; faxed to 623-773-6841; or e-mailed to jmcglothlen@usbr.gov no later than March 18.

The bureau's "Public Scoping Notice" contains more detailed information and can be obtained by writing to rkonst@usbr.gov, calling 623-773-6251 or by visiting http://www.usbr.gov/lc/phoenix/. Click the links under "Phoenix Area Office News" in the middle of the page.

The project is also expected to include a sediment processing and storage facility. The goal is to catch the coarse sediment, store it and develop a market for it in the construction industry, McGlothlen said.

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United States Department of the Interior

Fish and Wildlife Service
Arizona Ecological Services Field Office
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951
Telephone: (602) 242-0210 Fax: (602) 242-2513

MAY 17 '10
5/18 Ellis 1500

In Reply Refer to:
AESO/SE
22410-2010-I-0369

May 13, 2010

Memorandum

To: Chief, Environmental Resource Management Division, U.S. Bureau of Reclamation

From: Field Supervisor, U.S. Fish and Wildlife Service, Phoenix AZ

Subject: Request for Concurrence on Determination for "Rip-Rap" Excavation near Ashurst-Hayden Diversion Dam

Thank you for your correspondence of April 23, 2010, received on April 27, 2010. This memo documents our review of San Carlos Irrigation and Drainage District's (District) proposed "rip-rap" quarry, in Pinal County, in compliance with section 7 of the Endangered Species Act of 1973 (ESA) as amended (16 U.S.C. 1531 et seq.). Your correspondence concluded that the proposed project may affect, but is not likely to adversely affect the lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*). We concur with your determination and provide our rationale below.

Description of the Proposed Action

A complete description of the proposed action is found in your April 23, 2010 biological assessment (BA) and the accompanying maps and photo sent to our office the same day, and is incorporated herein by reference. The proposed project includes the quarrying of rock for use as "rip-rap" on a stabilization project near the Ashurst-Hayden Diversion Dam on the Gila River, east of the Town of Florence, in Pinal County, Arizona. The rock will be used to stabilize the right bank of the Gila River immediately downstream from the dam. The rock will be removed from several small hills located adjacent to the dam. The proposed project is part of a major rehabilitation of the water delivery facilities in fulfillment of the District's obligations pursuant to a water rights settlement agreement with the Gila River Indian Community and related legislative mandates (Title II, Arizona Water Settlements Act).

The proposed project will occur within the paloverde-cacti-mixed scrub series of the Arizona Upland Subdivision of Sonoran Desertscrub. The quarry will affect up to 50 saguaros (*Carnegiea gigantea*), an important forage species for the lesser long-nosed bat. The nearest known lesser long-nosed bat roost is approximately 33 miles from the project site. However, the lesser long-nosed bat can travel up to 40 miles from roost sites to forage each evening and the removal of up to 50 saguaros could reduce foraging opportunities for bats from roosts to the southwest. You have committed to transplant all single-stemmed saguaros (size class found to

be most successful when transplanted) near the project site and monitor their survival. Prior to construction, the site will be monitored for any use by lesser long-nosed bats. Additionally, all project activity will occur during daylight hours which should reduce the potential for any direct effects on the lesser long-nosed bat.

Determination of Effects

We concur with your determination that the proposed action may affect, but is not likely to adversely affect the lesser long-nosed bat for the following reasons:

- It is extremely unlikely that the species currently occurs in the action area of the proposed project based on the lack of roost sites in proximity to the project area and the dispersed nature of forage resources between the project and the nearest known roost. In addition, presence of lesser long-nosed bats will be determined prior to project construction and project activities will occur during daylight hours. Therefore, any potential direct or indirect effects on the species are discountable.

- Project effects to forage resources will be limited to the 50 saguaros located in the project area. Of the 50 saguaros, all single-stemmed saguaros will be transplanted on-site and monitored for survival. The effects to forage resources are insignificant.

- No critical habitat has been designated for the lesser long-nosed bat, therefore, no effects to critical habitat will occur as a result of the proposed action.

Thank you for your continued coordination. No further section 7 consultation is required for this project at this time. Should project plans change, or if information on the distribution or abundance of listed species or critical habitat becomes available, this determination may need to be reconsidered. In all future correspondence on this project, please refer to the consultation number 22410-2010-I-0369. We also encourage you to coordinate the review of this project with the Arizona Game and Fish Department. Should you require further assistance or if you have any questions, please contact Scott Richardson
(520) 670-6150 (x 242) or Sherry Barrett (x223).

for Steven L. Spangle

Sherry Barrett

cc (hard copy):
Field Supervisor, Fish and Wildlife Service, Phoenix, AZ (2)
Assistant Field Supervisor, Fish and Wildlife Service, Tucson, AZ
Fish and Wildlife Service, Tucson, AZ (Attn: Scott Richardson)

cc (electronic copy):
Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ

APPENDIX B

Agency and Public Comments on Draft EA and Reclamation's Responses

Agency and Public Comments on Draft EA and Reclamation's Responses

Name and Summary of Comments	Reclamation Response
Pinal County Development Services, Department of Public Works	
A review of the Environmental Assessment (EA) has determined that the proposed project will require a floodplain use permit. To obtain this permit, a complete drainage report prepared in accordance with *the Pinal County Drainage Design Manual* and meeting the requirements of the floodplain and drainage ordinances must be submitted for review. The report will need to be prepared by a State of Arizona–registered engineer. The submittal package will need to include two hard copies of the report and an electronic copy of the drainage report with supporting calculations, figures, and plans all provided in a PDF file. Any hydrologic and electronic models prepared as part of the design (i.e., HEC-RAS, HEC-2, HEC-1, HEC-HMS) needs to be provided in an electronic format for verification and review purposes. Preliminary plans showing the feasibility of the proposed design must be submitted as part of the report. A separate review of this drainage report will be performed, and any comments will be supplied to the applicant within 4 weeks of the initial submittal.	Reclamation acknowledges that a floodplain use permit would be required for the proposed action. If a decision is made to implement the proposed action, a drainage report would be prepared and submitted to Pinal County for its review.
The text discusses the "existing" vs. "no-action" alternatives. It is not clear what the difference is between these two conditions. Please explain.	The no action represents the existing condition projected into the future. Due to legal obligations, the no action alternative reflects the continuation of sediment removal (using existing methods) and long-term storage of this sediment on Federal lands proximate to the upper reach of the Florence–Casa Grande Canal. Because no land would be acquired under this alternative, modeling of the no action reflects a condition whereby long-term storage piles would be restricted to the 140 acres of existing Federal land.

Agency and Public Comments on Draft EA and Reclamation's Responses

Name and Summary of Comments	Reclamation Response
The report states "Based on the hydraulic analyses undertaken, the proposed action would be expected to reduce floodplain capacity and raise the 100-year floodplain by 1.3 feet in elevation above that expected under existing conditions based on flood modeling prepared for the project." Pinal County requires no adverse impact on the adjacent property owners as a result of the development. This would include a 1.3 foot rise in the water surface elevation. Option 1. Redesign the proposed development such that the increase in the water surface elevation is 0.1 feet at the boundary of adjacent properties. Option 2. Letters of acknowledgement and drainage easements that encompass the new floodplain from the property owners who will be impacted by the water surface elevation increase. Should Option 2 be selected, per recent correspondence with the Federal Emergency Management Agency (FEMA), a Conditional Letter of Map Revision (CLOMR) is required if the project will increase the base flood elevation (BFE) by more than 1 foot (applies where there is NOT a floodway delineated), Section 60.3 c (13) of Code of Federal Regulations Title 44. The CLOMR must be submitted to and approved by FEMA prior to the start of construction. The CLOMR must be submitted to and reviewed by Pinal County for community acknowledgement prior to submittal to FEMA. Note that Pinal County will not approve the CLOMR without the drainage easements and letters of acknowledgement. The CLOMR must include at least concept-level plans for the proposed construction. Based on the information being requested, additional comments will be forthcoming.	Subsequent to the receipt of this Pinal County letter, the project was redesigned in accordance with Pinal County requirements, and the hydraulic analysis was redone. As a result, the proposed action would be expected to raise the 100-year floodplain by no more than 1.0 foot in elevation above that expected under existing conditions. Based on discussions with Pinal County staff, the rehabilitation of the headworks and the excavation of the settling basin would be done under one floodplain use permit. No construction would occur on the headworks or settling basin until this permit is issued. A second permit would be needed to allow the construction of the berms designed to protect the settling basin and a third permit would be needed to allow the stockpiling of sediment on-site for long-term storage and associated berms to protect these stockpiles. No work would occur on these project elements until the associated Pinal County floodplain use permit is approved. As noted, if a decision is made to implement the proposed action, letters of acknowledgement and drainage easements would be acquired from any property owners affected. The Final EA was revised in response to comments received from Pinal County.
Please resubmit two paper copies of the revised report, accompanying figures/exhibits and supporting calculations, along with written responses to the comments. Please provide a CD containing an electronic copy of the drainage report, calculations, and figures in a PDF file as part of the next submittal. If applicable, please provide electronic copies of any Hydrologic and Hydraulic Models (i.e., HEC-RAS, HEC-2, HEC-1, HEC-HMS) on a separate CD for verification and review purposes.	The Final EA will be submitted to Pinal County upon completion. If a decision is made to implement the proposed action, the drainage report and associated materials requested by Pinal County will also be submitted.

Agency and Public Comments on Draft EA and Reclamation's Responses

Name and Summary of Comments	Reclamation Response
White Mountain Apache Tribe Heritage Program	
There is no need to send additional information unless project planning or implementation results in the discovery of sites and/or items having known or suspected Apache cultural affiliation. We have received and reviewed the EA for the proposed Phase I Rehabilitations of the San Carlos Irrigation Project Facilities, and we've determined the proposed actions for the above-mentioned project will not have an effect on the White Mountain Apache Tribe's Cultural Heritage Resources and/or historic properties. Regardless, we further recommend that any/all ground disturbance should be monitored if there are reasons to believe that human remains and/or funerary objects are present. If such remains and/or objects are encountered, all construction activities should be stopped and the proper authorities and/or affiliated tribe(s) should be notified to evaluate the situation.	The project site has no known Apache cultural affiliation. There are no suspected human burials or funerary objects associated with the site. If previously unidentified cultural resources, especially human remains or funerary objects, are encountered during construction, work will immediately cease at that location and the project archaeologist from Reclamation's Phoenix Area Office will be notified.
Copper Basin Railway	
Regarding Section 2.2.1, Restoration of Fuse Plug, will the Proposed Action threaten the current infrastructure of Copper Basin Railway's main line?	The fuse plug is designed to wash out at a predictable water surface elevation. When it erodes, flows would continue downstream. There would be no effect on facilities at the elevation of the Copper Basin Railway.
Suggested future access location on Copper Basin Railway's right-of-way will require a written contract between the railroad and the governing agency to ensure adequate protection from trespass violations and vandalism.	Comment noted.
How does Copper Basin Railway's future existence, ownership, and commodity handling affect the overall environment of this project?	The railway right-of-way is part of the environment that would potentially be affected by the project if the project includes rail transport of sediment off-site. If market demand warrants rail transport in the future, coordination with the Copper Basin Railway would occur at such time.
Will measures taken by such action encourage use of Price Road and suggested alternate access route on Copper Basin Railway? If so, will this project include measures to ensure the same protection used to secure the new construction and improvements at the Ashurst-Hayden Diversion Dam project site?	No use of Price Road for construction or operation of the Proposed Action is anticipated; therefore, no project-related vehicles would cross the railroad. Furthermore, sediment piles, which could attract off-highway vehicle enthusiasts to the area, would be located on the south side of the Gila River and not in proximity to the Copper Basin Railway.
If determined to be necessary, all engineering design, new track construction, and provision of service will be identified and coordinated by Copper Basin Railway and associates. Copper Basin Railway will generate a contract of construction, maintenance, and service before commencement of any such work.	Comment noted.
How will installation of antennas cause physical alteration of the setting of the Copper Basin Railway's infrastructure.	The placement of antennas would have no effect on railroad property.

PINAL • COUNTY
Wide open opportunity

Pinal County
Development Services
Department of Public Works

P.O. Box 727
31 North Pinal Street, Bldg F
Florence, Arizona 85232

ENGINEERING ∝ TRANSPORTATION ∝ FLOOD CONTROL ∝ RECYCLING-SOLID WASTE ∝ EMERGENCY MANAGEMENT

Project Name:	Draft Environmental Assessment Phase I Rehabilitation San Carlos Irrigation Project Facilities	**Reviewed By:**	Flood Control Section Pinal County Department of Public Works
Engineering Firm	EcoPlan Associates, Inc. Dated June 2010 Not sealed.	**Received:** **1st Review Date:** **2nd Review Date:** **3rd Review Date**	July 6, 2010 July 14, 2010

Section	Comment #	RESPOND TO ALL COMMENTS AND REDLINES.
	1	A review of the Environmental Assessment Statement has determined that the proposed project will require a floodplain use permit. To obtain this permit, a complete drainage report prepared in accordance Pinal County Drainage Design Manual and meeting the requirements of the Floodplain and Drainage Ordinances must be submitted for review. The report will need to be prepared by a State of Arizona registered engineer. The submittal package will need to include two hard copies of the report electronic copy of the drainage report, supporting calculations, figures and plans all provided in a PDF format. Any hydrologic and electronic models prepared as part of the design (i.e. HEC-RAS, HEC-2, HEC-1, HEC-HMS) needs to be provided in an electronic format for verification and review purposes. In addition, preliminary plans showing the feasibility of the proposed design must be submitted as part of the report. A separate review of this drainage report will be performed and any comments will be supplied to the applicant within four weeks of the initial submittal.
3.9.2	2	The text discusses the "existing" vs. "no-action" alternatives. It is not clear what the difference is between these two conditions. Please explain.
3.9.2	3	The report states "Based on the hydraulic analyses undertaken, the proposed action would be expected to reduce floodplain capacity and raise the 100-year floodplain by 1.3 feet in elevation above that expected under existing conditions based on flood modeling prepared for the project." Pinal County requires no adverse impact on the adjacent property owners as a result of the development. This would include a 1.3 foot rise in the water surface elevation. Option 1) Redesign the proposed development such that the increase in the water surface elevation is 0.1 at the boundary of adjacent properties. Option 2) Letters of acknowledgement and drainage easements that encompass the new floodplain from the property owners who will be impacted by the water surface elevation increase. Should Option 2 be selected, per recent correspondence with FEMA, a Conditional Letter of Map Revision (CLOMR) is required if the project will increase the base flood elevation (BFE) by more than 1 foot (applies where there is NOT a floodway delineated) Section 60.3 c (13) of the Code of Federal Regulations Title 44. The CLOMR must be submitted to and approved by FEMA prior to the start of construction. The CLOMR must be submitted to and reviewed by Pinal County for community acknowledgement prior to submittal to FEMA. Note that Pinal County will not approve the

PINAL • COUNTY
Wide open opportunity

Pinal County
Development Services
Department of Public Works

P.O. Box 727
31 North Pinal Street, Bldg F
Florence, Arizona 85232

ENGINEERING ∝ TRANSPORTATION ∝ FLOOD CONTROL ∝ RECYCLING-SOLID WASTE ∝ EMERGENCY MANAGEMENT

CLOMR without the drainage easements and letters of acknowledgement. The CLOMR must include at least concept level plans for the proposed construction.

3 Based on the information being requested, additional comments **will** be forth coming.

4 Please resubmit 2 paper copies of the revised report, accompanying figures/exhibits and supporting calculations, along with written responses to the comments. Please provide a CD containing an electronic copy of the drainage report, calculations and figures in a PDF format as part of the next submittal. If applicable, please provide electronic copies of any Hydrologic and Hydraulic Models (i.e. HEC-RAS, HEC-2, HEC-1, HEC-HMS) on a separate CD for verification and review purposes.

Telephone: (520)866-6411

FAX: (520) 866-6511

Reviewed By: JMW - JEF
Verified by: CBR - JEF

White Mountain Apache Tribe Heritage Program
PO Box 507 Fort Apache,AZ 85926
1 (928) 338-3033 Fax: (928) 338-6055

To: John McGlothlen, Bureau of Reclamation
Date: July 9, 2010
Project: Phase I Rehabilitation of the San Carlos Irrigation Project Facilities

.....

The White Mountain Apache Historic Preservation Office (THPO) appreciates receiving information on the proposed project, dated June 28, 2010 In regards to this, please attend to the checked items below.

► ***There is no need to send additional information unless project planning or implementation results in the discovery of sites and/or items having known or suspected Apache Cultural affiliation.***

☐ The proposed project is located within an area of probable cultural or historical importance to the White Mountain Apache Tribe (WMAT). As part of the effort to identify historical properties that maybe affected by the project we recommend an ethno-historic study and interviews with Apache Elders. The Cultural Resource Director, ***Mr. Ramon Riley*** would be the contact person at (928) 338-4625 should this become necessary.

► Please refer to the attached additional notes in regards to the proposed project:

We have received and reviewed the EA for the proposed Phase I Rehabilitations of the San Carlos Irrigation Project Facilities, and we've determined the proposed actions for the above mentioned project ***will not have an effect*** on the White Mountain Apache tribe's Cultural Heritage Resources and/or historic properties. Regardless, we further recommend that any/all ground disturbance should be monitored ***if*** there are reasons to believe that human remains and/or funerary objects are present, if such remains and/or objects are encountered all construction activities should be stopped and the proper authorities and/or affiliated tribe(s) be notified to evaluate the situation.

We look forward to continued collaborations in the protection and preservation of places of cultural and historical significance.

Sincerely,

Mark T. Altaha
White Mountain Apache Tribe
Historic Preservation Officer
Email: markaltaha@wmat.us

OFFICIAL FILE COPY
PHOENIX AREA OFFICE
ACTION BY:
DUE DATE:
RECEIVED:
JUL 06 '10
DATE | SURNAME | CODE
7/8/10 | JM | 1500
RETURN TO:
CLASSIFIC.
CONTROL NO.
PROJECT

COPPER BASIN RAILWAY, INC.

July 1, 2010

Mr. John McGlothlen
Reclamation Phoenix Area Office
6150 West Thunderbird Road
Glendale Arizona 85306-4001

John:

Upon review of the Draft Environmental Assessment for Rehabilitation of San Carlos Irrigation Project Facilities;

Using the map provided on page 8 for assistance and information in **Article 2.2.1 "Restoration of Fuse Plug"** on page 10. Will such proposed action threaten the current infrastructure of Copper Basin Railway's main line?

Using information in **Article 2.2.3 "Construction and Operation of Sediment removal and Storage Facility"** on page 14. Suggested future access location on Copper Basin Railway's Right-of-Way will require a written contract between the Railroad and the governing agency to ensure adequate protection from trespass violations and vandalism.

Using information in **Article 3.2.**1 **"Affected Environment"** on page 20. How does/will Copper Basin Railway's existence, ownership and commodity handling effect the overall environment of this project?

Using information in **Article 3.2.2 "Environmental Consequences"** on page 23, will measures taken by such action encourage use of Price Road and suggested alternate access route on Copper Basin Railway? If so, will this project include measures to ensure the same protection used to secure the new construction and improvements at the Ashhurst-Hayden Diversion Dam project site?

Using the information in **Article 3.2.2 "Environmental Consequences"** on page 23, if determined to be necessary, all engineering design, new track construction and provision of service will be identified and coordinated by Copper Basin Railway and associates. Copper Basin Railway will generate a contract of construction, maintenance and service before commencement of any such work.

P.O. DRAWER I HAYDEN, ARIZONA 85235 (520) 356-7730

Using information in **Article 3.5.2 "Environmental Consequences"** on pages 32 & 33, how will installation of antennas cause physical alterations to the setting of the Copper Basin Railway's infrastructure?

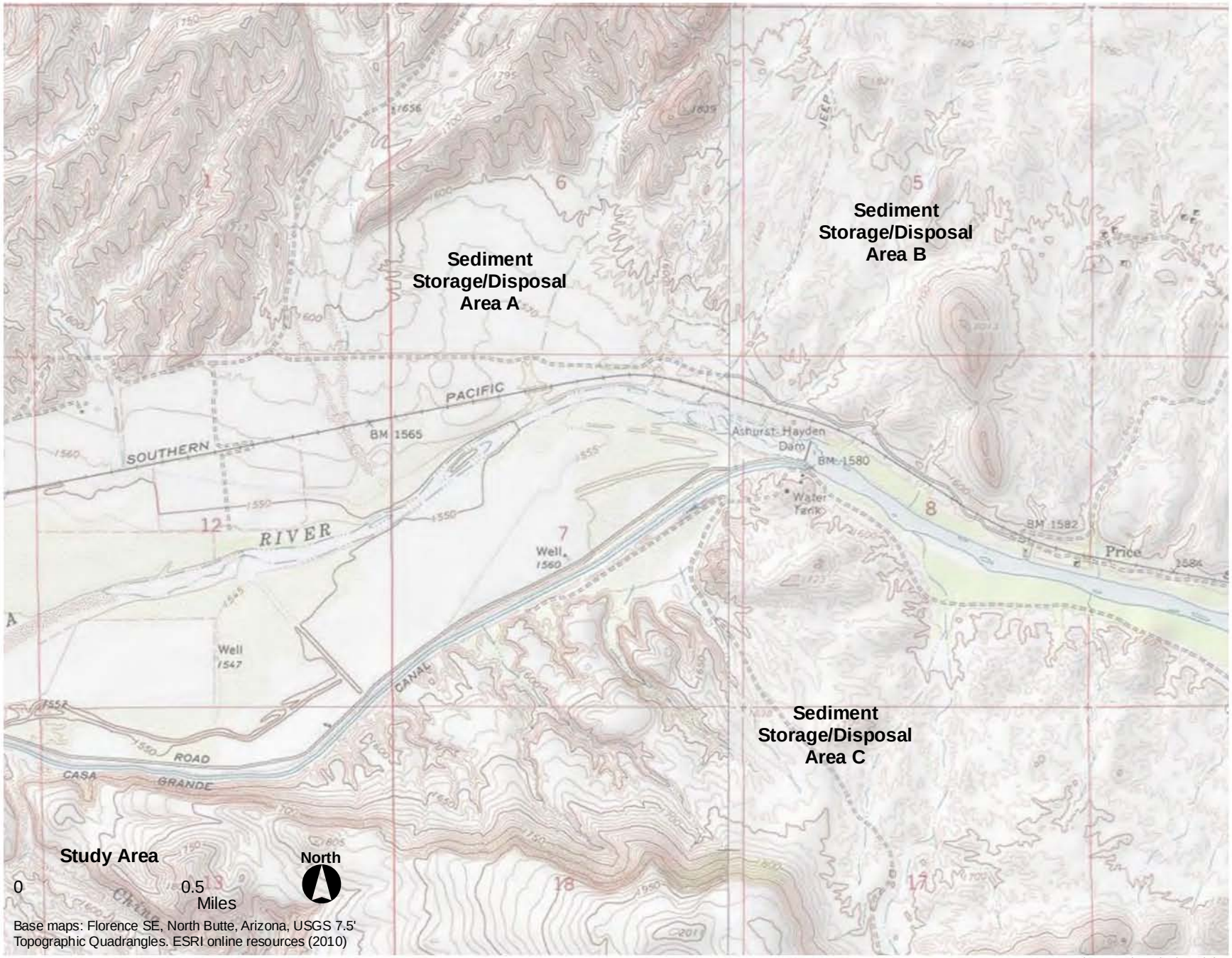
Sincerely,

Bobby R. Blake
General Superintendent

P.O. DRAWER I HAYDEN, ARIZONA 85235 (520) 356-7730

APPENDIX C

Long-term Sediment Storage Alternatives



W\07-033014\NEPA\EA\AppA\FigA

Figure A. Initial sediment storage alternatives.

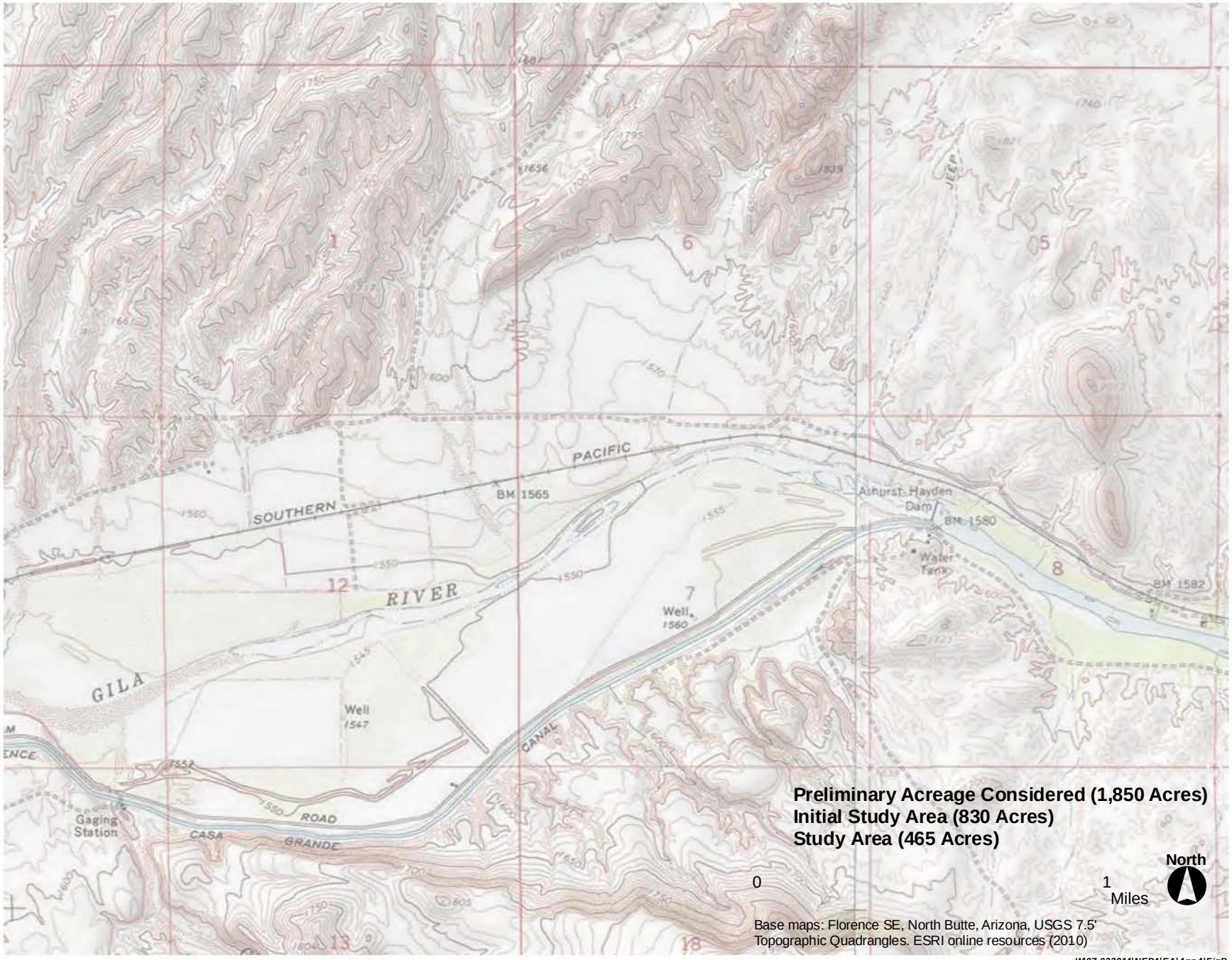


Figure B. Long-term sediment storage alternatives.

W\07-033014\NEPA\EA\AppA\FigB

APPENDIX D

Cultural Consultation Letters

ARIZONA STATE PARKS

1300 W. WASHINGTON
PHOENIX, ARIZONA 85007
TELEPHONE 602-542-4174

FIFE SYMINGTON
GOVERNOR

STATE PARKS BOARD MEMBERS

RUKIN JELKS
CHAIR
ELGIN

BILLIE A. GENTRY
SCOTTSDALE

WILLIAM G. ROE
TUCSON

JOSEPH H. HOLMWOOD
MESA

SHERI J. GRAHAM
SEDONA

RUTH U. PATTERSON
ST. JOHNS

M. JEAN HASSELL
STATE LAND COMMISSIONER

KENNETH E. TRAVOUS
EXECUTIVE DIRECTOR

CHARLES R. EATHERLY
DEPUTY DIRECTOR

3 October 1995

Bruce D. Ellis, Chief
Environmental Management Division
Bureau of Reclamation
Phoenix Area Office
PO Box 9980
Phoenix, AZ 85068-0980

Attention: Tom Lincoln

RE: Gila River, HAER Doc/San Carlos Irrigation Project, BR

Dear Mr. Ellis:

I have reviewed the Draft HAER Report on the San Carlos Irrigation Project and find it to be thorough and complete.

We appreciate the effort the Bureau of Reclamation has made in completing this project and the concerns your office brings to the preservation and management of cultural resources under your control.

Sincerely,

James Garrison
AZSHPO

United States Department of the Interior

NATIONAL PARK SERVICE
Pacific West Field Area
Pacific Great Basin System Support Office
600 Harrison Street, Suite 600
San Francisco, California 94107-1372

IN REPLY REFER TO:

H40(PGBC-PC)

April 18, 1996

Ms. Christine Pfaff
Technical Services Center
Bureau of Reclamation
P.O. Box 25007
Denver, Colorado 80225-0007

Re: Historic American Engineering Record documentation of the San Carlos Irrigation Project, Coolidge Vicinity, Pinal County, Arizona

Dear Ms. Pfaff:

The National Park Service acknowledges the receipt of and accepts the Historic American Engineering Record (HAER) documentation of the San Carlos Irrigation Project. This documentation meets the Historic American Engineering Record standards and complies with the Memorandum of Agreement among the Bureau of Reclamation, Arizona State Historic Preservation Officer, and the Advisory Council on Historic Preservation.

The completed documentation will be transmitted to the Prints and Photographs Division of the Library of Congress. The records are in the public domain and will be accessible through the Library. We will provide a copy of the documentation to the State Historic Preservation Officer.

The documentation is very thorough and well-executed and will be a valuable addition to the record of America's historic engineering and industrial resources.

Sincerely,

M. Pepin-Donat

Margaret Pepin-Donat
Co-Team Leader, Cultural Resources

cc:
HABS/HAER, WASO
SHPO, AZ
Advisory Council

APPENDIX E

Hydraulic Analyses Methodology and Results

HYDRAULIC ANALYSES
SAN CARLOS IRRIGATION PROJECT PHASE 1 REHABILIATION

Prepared by: GEI Consultants, Inc.

Hydraulic analyses for the San Carlos Irrigation Project Phase 1 Rehabilitation were performed using HEC-RAS version 4.0.0. HEC-RAS geometry data was built using new two-foot contour survey data developed within the vicinity of the project by Cooper Aerial Surveys and augmented with USGS DEM data. Data from the USGS DEM was adjusted to be on the same datum as that of the new mapping. HEC-GeoRAS was used to generate the HEC-RAS geometry data. Manning's n values of 0.040 and 0.065 were assigned for the main channel and overbanks, respectively. Additionally, a range of Manning's n values (i.e., channel: 0.03-0.04 and overbanks: 0.04-0.065) were applied during sensitivity analysis.

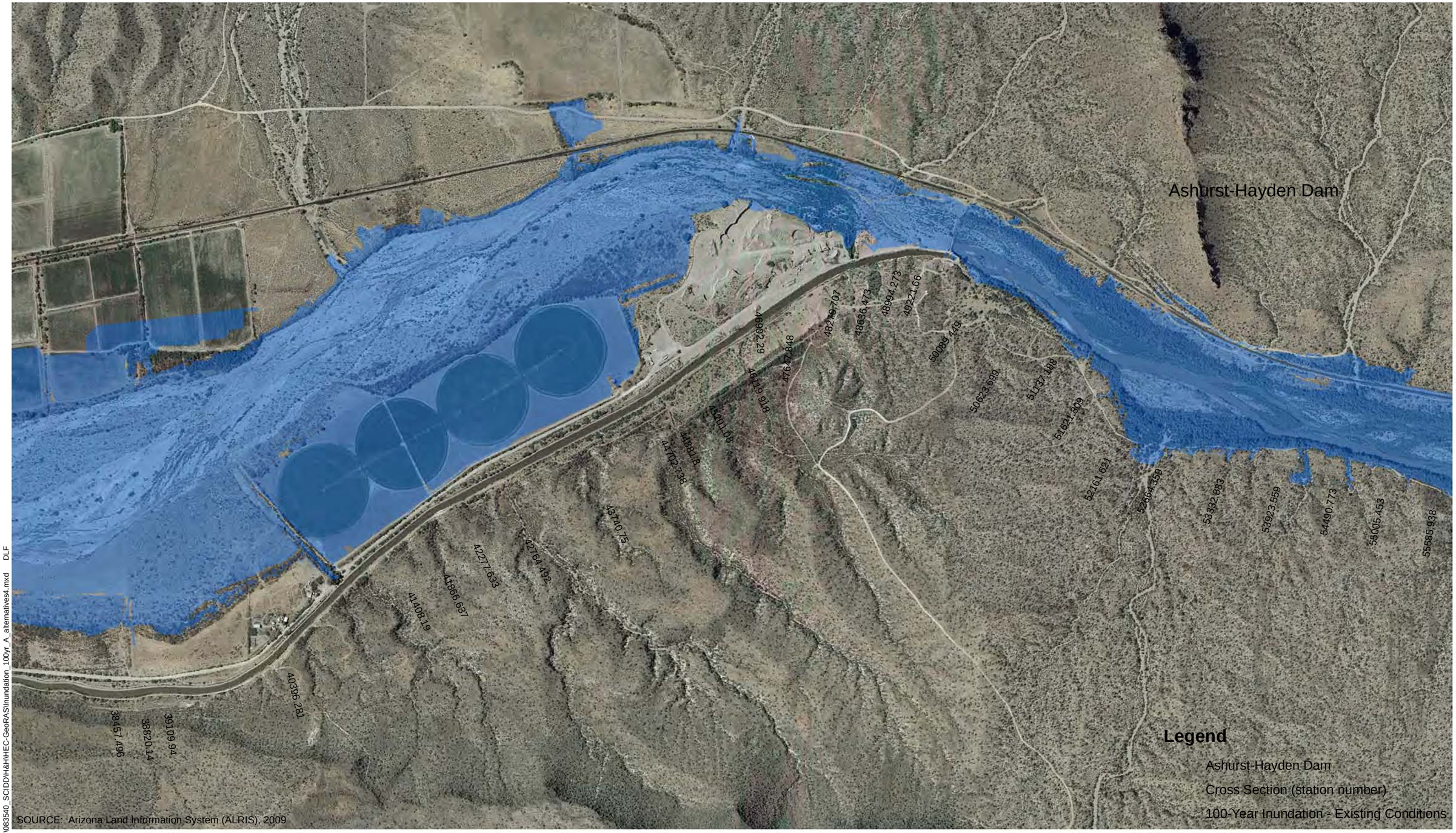
In the HEC-RAS model, the downstream boundary was set to the rating curve, which was derived from the water surface elevation reported in the Flood Insurance Study at Florence (FEMA 2007) for the most upstream cross-section.

Hydraulic analyses of flood flows were based on a model configuration that assumed that the radial gate at the Ashurst-Hayden Diversion Dam was fully open and that the flashboards along the dam's overflow section were down. Modeling was performed using flows corresponding to the 100-year recurrence intervals. Under each of these conditions, a flow of 600 cubic feet per second was assumed to be diverted by the Headworks Structure into the Florence-Casa Grande Canal.

Modeling used to generate 100-year inundation maps adopts FEMA's assumption that flows of this magnitude would not be governed by regulation at Coolidge Dam. A comparison was made between the 100-year flood boundary based on the adopted FEMA HEC-1 routing model and the existing FEMA-100 year floodplain mapping of the project area. When comparing FEMA mapping of the 100-year floodplain in the project area with mapping developed from FEMA data for the project, differences in inundation levels between the maps result from the following two differences in methodology:

1) The project 100-year floodplain is based on two-foot contour mapping that was developed for the project and was not available at the time the FEMA mapping was prepared.
2) The 100-year flow used in the modeling for the project mapping is the same as that used by FEMA to develop their detailed analysis of the area around Florence. However, because the project area is upstream of FEMA's detailed study area, FEMA's mapping of this area was not based on the modeling prepared for the detailed study, but instead used approximate methods. No base flood elevation was calculated by FEMA in the SCIDD project reach.

As a result of the modeling efforts described above, the projected inundation limits of the 100-year floodplain were mapped for the existing conditions, the proposed action, and the no action alternative (Appendix D, Figures 10, 11, and 12, respectively).



2,000 1,000 0 2,000

Feet

San Carlos Irrigation and Drainage District

Pinal County, Arizona

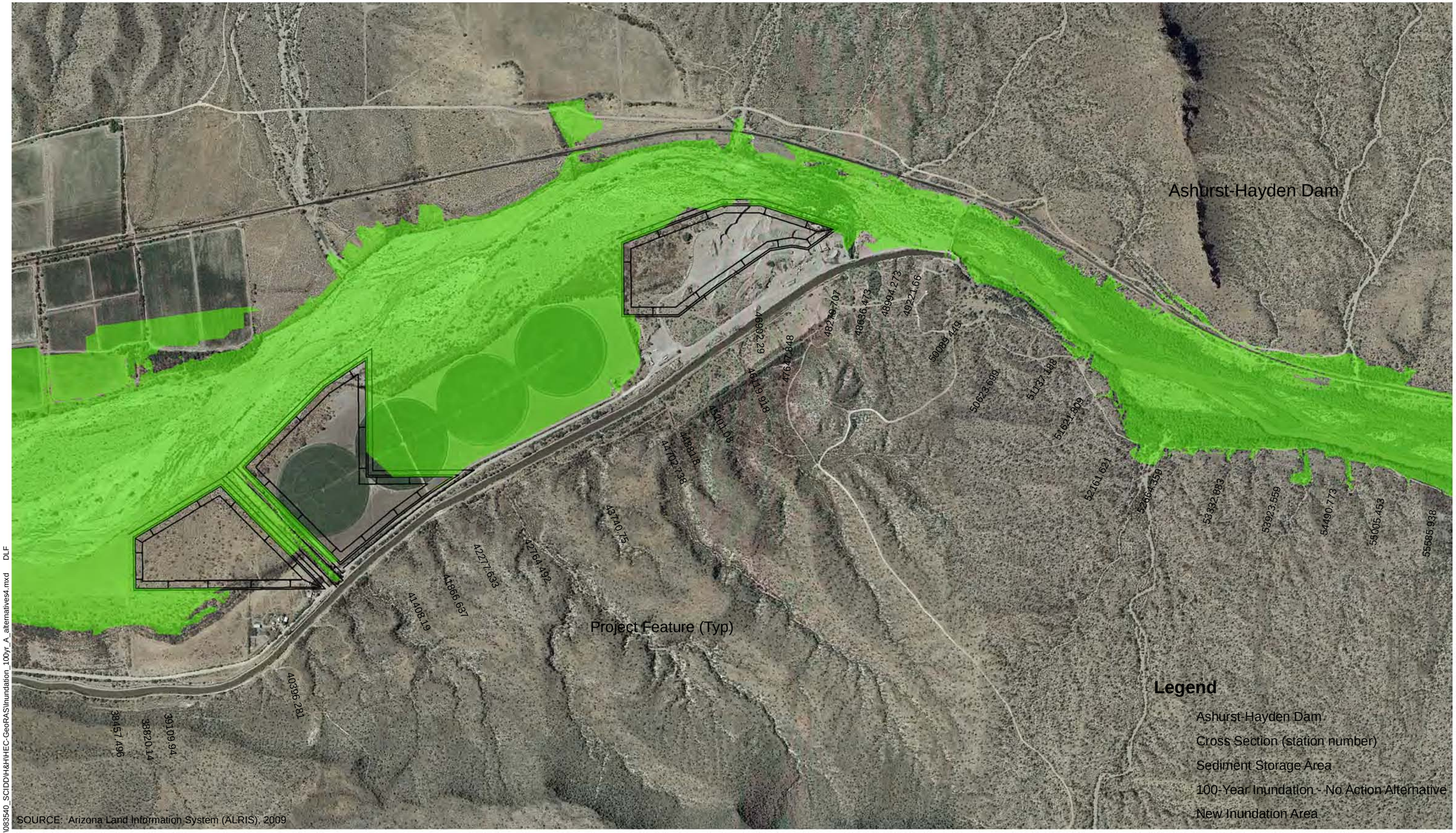
San Carlos Irrigation Project Rehabilitation

100-YEAR INUNDATION
EXISTING CONDITIONS

JUNE 2010

FIGURE 10

09-Jun-2010 Z:\Projects\083540_SCIDDIH&H\HEC-GeoRAS\Inundation_100yr_A_alternatives4.mxd DLF



2,000 1,000 0 2,000

Feet

San Carlos Irrigation and Drainage District

Pinal County, Arizona

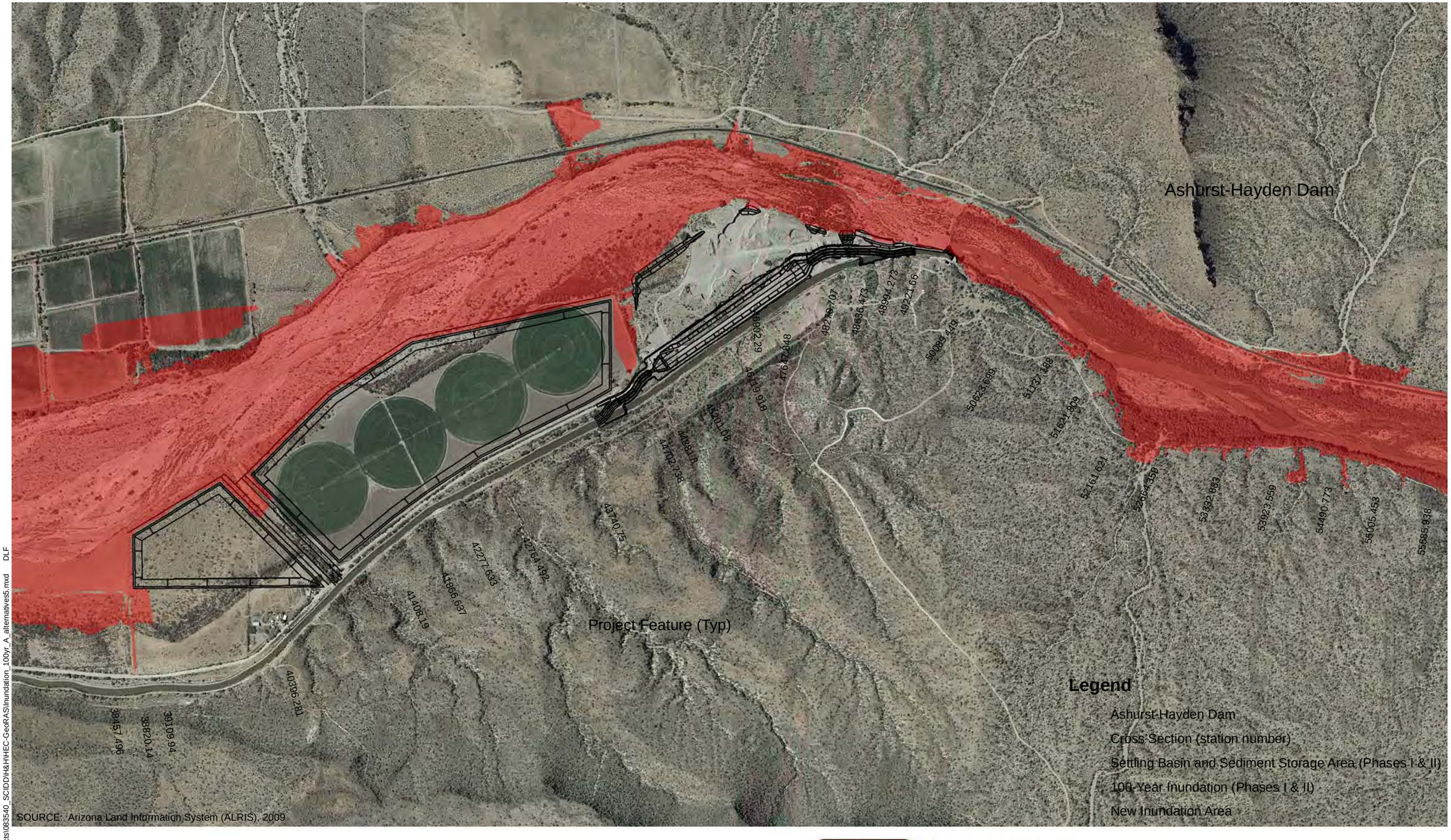
San Carlos Irrigation Project Rehabilitation

100-YEAR INUNDATION
NO ACTION ALTERNATIVE

JUNE 2010

FIGURE 11

09-Jun-2010 Z:\Projects\083540_SCIDD\H&H\HEC-GeoRAS\Inundation_100yr_A_alternatives4.mxd DLF



2,000 1,000 0 2,000

Feet

San Carlos Irrigation and Drainage District

Pinal County, Arizona

San Carlos Irrigation Project Rehabilitation

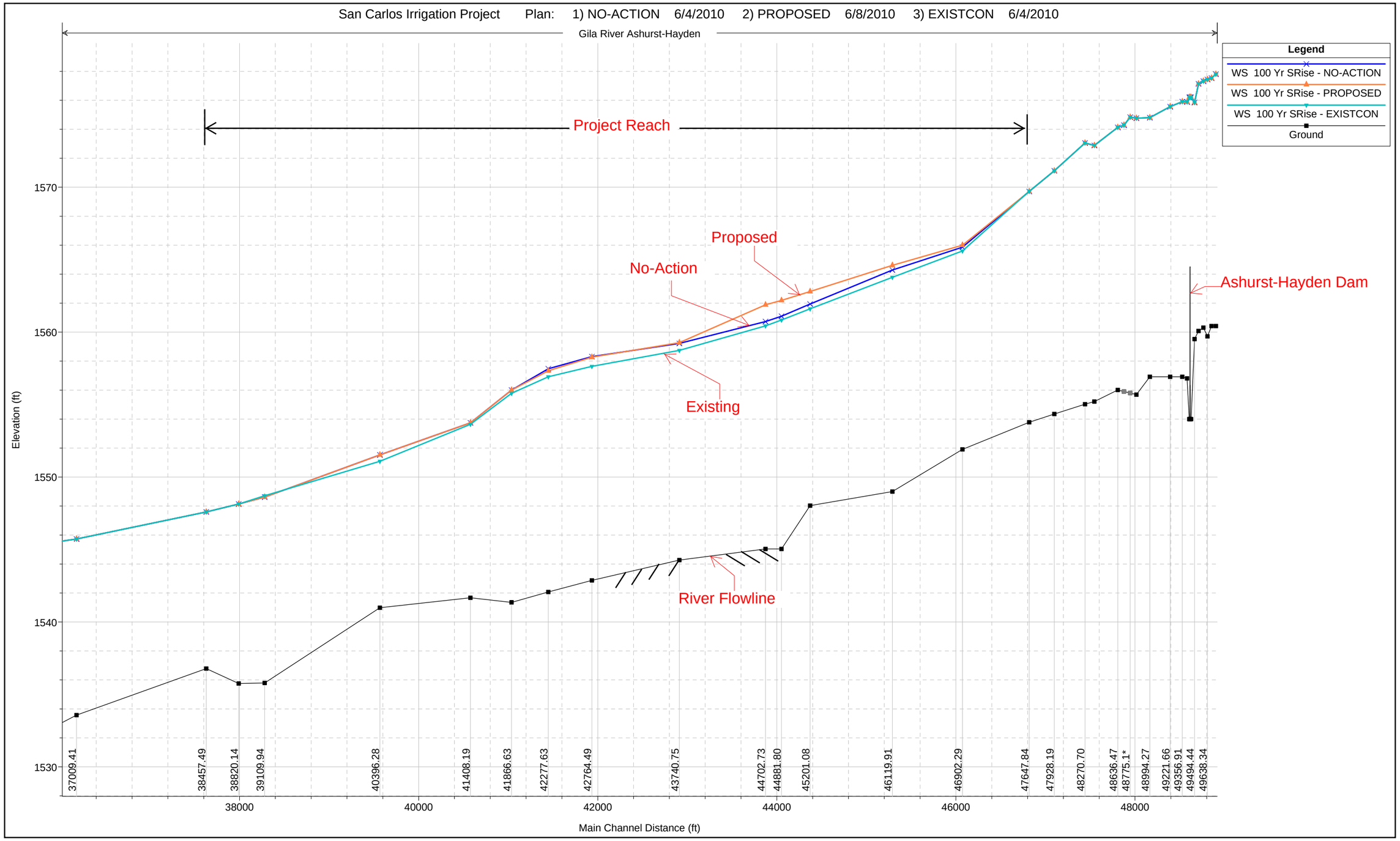
100-YEAR INUNDATION
PHASES I & II

JULY 2010

FIGURE 12

30-Jul-2010 Z:\Projects\083540_SCIDD\H&H\HEC-GeoRAS\Inundation_100yr_A_alternatives5.mxd DLF

Water Surface Elevation Profiles

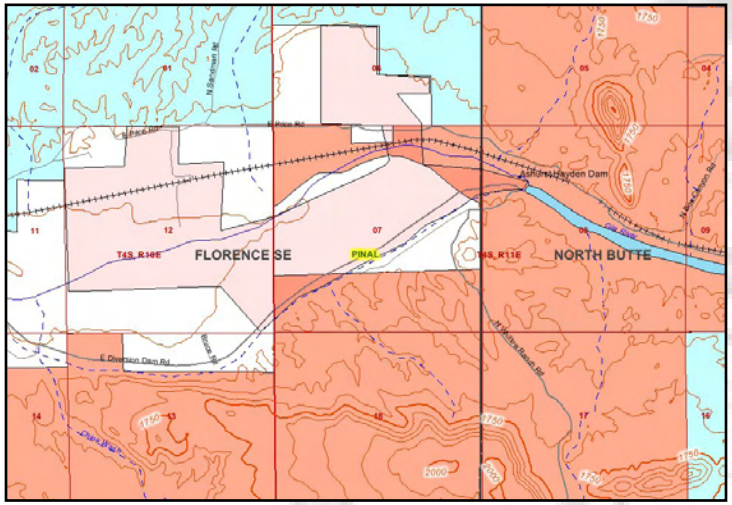


APPENDIX F

AGFD On-line Environmental Review Tool Results

Arizona's On-line Environmental Review Tool
Search ID: 20100217011460
Project Name: 07-033014 San Carlos Irrigation
Date: 2/17/2010 9:53:53 AM

Project Location



Project Name: 07-033014 San Carlos Irrigation
Submitted By: Patrick Dockens
On behalf of: CONSULTING
Project Search ID: 20100217011460
Date: 2/17/2010 9:53:49 AM
Project Category: Water Use, Transfer, and Channel Activities,Canal/irrigation construction/maintenance
Project Coordinates (UTM Zone 12-NAD 83): 474978.602, 3662240.775 meter
Project Area: 773.751 acres
Project Perimeter: 13484.597 meter
County: PINAL
USGS 7.5 Minute Quadrangle ID: 1449
Quadrangle Name: FLORENCE SE
Project locality is not anticipated to change

Location Accuracy Disclaimer

Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Receipt is solely responsible for the project location and thus the correctness of the Project Review Receipt content.

The Department appreciates the opportunity to provide in-depth comments and project review when additional information or environmental documentation becomes available.

Special Status Species Occurrences/Critical Habitat/Tribal Lands within 3 miles of Project Vicinity:

Name	Common Name	FWS	USFS	BLM	State
Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC	S	S	
CH for Empidonax traillii extimus	Designated Critical Habitat for southwestern willow flycatcher				
Catostomus clarkii	Desert Sucker	SC	S	S	
Catostomus insignis	Sonora Sucker	SC	S	S	
Coccyzus americanus	Yellow-billed Cuckoo (Western U.S. DPS)	C			WSC
Echinomastus erectocentrus var. acunensis	Acuna Cactus	C			HS
Gopherus agassizii (Sonoran Population)	Sonoran Desert Tortoise	SC	S	S	WSC
PCH for Meda fulgida	Proposed Critical Habitat for spikedace				

 APPLICATION INITIALS: _____

Please review the entire receipt for project type recommendations and/or species or location information and retain a copy for future reference. If any of the information you provided did not accurately reflect this project, or if project plans change, another review should be conducted, as this determination may not be valid.

Arizona's On-line Environmental Review Tool:

1. This On-line Environmental Review Tool inquiry has generated recommendations regarding the potential impacts of your project on Special Status Species (SSS) and other wildlife of Arizona. SSS include all U.S. Fish and Wildlife Service federally listed, U.S. Bureau of Land Management sensitive, U.S. Forest Service sensitive, and Arizona Game and Fish Department (Department) recognized species of concern.
2. These recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation). These recommendations are preliminary in scope, designed to provide early considerations for all species of wildlife, pertinent to the project type you entered.
3. This receipt, generated by the automated On-line Environmental Review Tool does not constitute an official project review by Department biologists and planners. Further coordination may be necessary as appropriate under the National Environmental Policy Act (NEPA) and/or the Endangered Species Act (ESA).

The U.S. Fish and Wildlife Service (USFWS) has regulatory authority over all federally listed species under the ESA. Contact USFWS Ecological Services Offices: http://arizonaes.fws.gov/.

Phoenix Main Office
2321 W. Royal Palm Road, Suite 103
Phoenix, AZ 85021
Phone 602-242-0210
Fax 602-242-2513

Tucson Sub-Office
201 North Bonita, Suite 141
Tucson, AZ 85745
Phone 520-670-6144
Fax 520-670-6154

Flagstaff Sub-Office
323 N. Leroux Street, Suite 101
Flagstaff, AZ 86001
Phone 928-226-0614
Fax 928-226-1099

Disclaimer:

1. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area.
2. The Department's Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there.
3. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HDMS data contains information about species occurrences that have actually been reported to the Department.

Arizona Game and Fish Department Mission

To conserve, enhance, and restore Arizona's diverse wildlife resources and habitats through aggressive protection and

 APPLICATION INITIALS: _____

management programs, and to provide wildlife resources and safe watercraft and off-highway vehicle recreation for the enjoyment, appreciation, and use by present and future generations.

Project Category: Water Use, Transfer, and Channel Activities,Canal/irrigation construction/maintenance

Project Type Recommendations:

Based on the project type entered; coordination with Arizona Department of Environmental Quality may be required (http://www.azdeq.gov/).

Based on the project type entered; coordination with Arizona Department of Water Resources may be required (http://www.water.az.gov/adwr/)

Based on the project type entered; coordination with State Historic Preservation Office may be required http://azstateparks.com/SHPO/index.html

Based on the project type entered; coordination with U.S. Army Corps of Engineers may be required (http://www.spl.usace.army.mil/regulatory/phonedir.html)

During planning and construction, minimize potential introduction or spread of exotic invasive species. Invasive species can be plants, animals (exotic snails), and other organisms (e.g. microbes), which may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g. livestock forage reduction, increase wildfire risk). The terms noxious weed or invasive plants are often used interchangeably. Precautions should be taken to wash all equipment utilized in the project activities before and after project activities to reduce the spread of invasive species. Arizona has noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245). See Arizona Department of Agriculture website for restricted plants http://www.azda.gov/PSD/quarantine5.htm. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive plant control methods including: pesticide, herbicide, biological control agents, and mechanical control: http://www.usda.gov/wps/portal/usdahome. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information http://www.azgfd.gov/h_f/hunting_rules.shtml.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife.

Follow manufacturer's recommended application guidelines for all chemical treatments. The U.S. Fish and Wildlife Service, Region 2, Environmental Contaminants Program has a reference document that

serves as their regional pesticide recommendations for protecting wildlife and fisheries resources, titled "Recommended Protection Measures for Pesticide Applications in Region 2 of the USFWS." The Department recommends direct or indirect impacts to sensitive species and their forage base from the application of chemical pesticides or herbicides be considered carefully.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (including spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

Recommendations will be dependant upon goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42”, minimum height for bottom 16”. Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18” minimum height on the bottom). Please refer to the Department's Fencing Guidelines located at http://www.azgfd.gov/hgis/guidelines.aspx.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Project Location and/or Species recommendations:

Heritage Data Management System records indicate that one or more listed, proposed, or candidate species or Critical Habitat (Designated or Proposed) have been documented in the vicinity of your project (refer to page 1 of the receipt). Please contact:
Ecological Services Office
US Fish and Wildlife Service
2321 W. Royal Palm Rd.
Phoenix, AZ 85021-4951
Phone: 602-242-0210
Fax: 602-242-2513

Heritage Data Management System records indicate that Sonoran desert tortoise have been documented within the vicinity of your project area (refer to the species list on page 1 of the receipt). Please review the Tortoise Handling Guidelines found on the Environmental Review Home Page: http://www.azgfd.gov/hgis/guidelines.azpx.

Recommendations Disclaimer:

1. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project.
2. These recommendations are proposed actions or guidelines to be considered during **preliminary project development**.
3. Additional site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.
4. Making this information directly available does not substitute for the Department’s review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. The Department is interested in the conservation of all fish and

wildlife resources, including those Special Status Species listed on this receipt, and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
6. **Further coordination requires the submittal of this initialed and signed Environmental Review Receipt with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map).**
7. Upon receiving information by AZGFD, please allow 30 days for completion of project reviews. Mail requests to:

Project Evaluation Program, Habitat Branch
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086-5000
Phone Number: (623) 236-7600
Fax Number: (623) 236-7366

Terms of Use

By using this site, you acknowledge that you have read and understand the terms of use. Department staff may revise these terms periodically. If you continue to use our website after we post changes to these terms, it will mean that you accept such changes. If at any time you do not wish to accept the Terms, you may choose not to use the website.

1. This Environmental Review and project planning website was developed and intended for the purpose of screening projects for potential impacts on resources of special concern. By indicating your agreement to the terms of use for this website, you warrant that you will not use this website for any other purpose.
2. Unauthorized attempts to upload information or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act .
3. The Department reserves the right at any time, without notice, to enhance, modify, alter, or suspend the website and to terminate or restrict your access to the website.
4. This Environmental Review is based on the project study area that was entered. The review must be redone if the project study area, location, or the type of project changes. If additional information becomes available, this review may need to be reconsidered.
5. A signed and initialed copy of the Environmental Review Receipt indicates that the entire receipt has been read by the signer of the Environmental Review Receipt.

Security:

The Environmental Review and project planning web application operates on a complex State computer system. This system is monitored to ensure proper operation, to verify the functioning of applicable security features, and for other like purposes. Anyone using this system expressly consents to such monitoring and is advised that if such monitoring reveals possible evidence of criminal activity, system personnel may provide the evidence of such monitoring to law enforcement officials. Unauthorized attempts to upload or change information; to defeat or circumvent security measures; or to utilize this system for other than its intended purposes are prohibited.

This website maintains a record of each environmental review search result as well as all contact information. This information is maintained for internal tracking purposes. Information collected in this application will not be shared outside of the purposes of the Department.

If the Environmental Review Receipt and supporting material are not mailed to the Department or other appropriate agencies within six (6) months of the Project Review Receipt date, the receipt is considered to be null and void, and a new review must be initiated.

 APPLICATION INITIALS: _____

Print this Environmental Review Receipt using your Internet browser's print function and keep it for your records. Signature of this receipt indicates the signer has read and understands the information provided.

Signature:_____

Date: _____

Proposed Date of Implementation: _____

Please provide point of contact information regarding this Environmental Review.

Application or organization responsible for project implementation

Agency/organization:_____

Contact Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

E-mail: _____

Person Conducting Search (if not applicant)

Agency/organization:_____

Contact Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

E-mail: _____

 APPLICATION INITIALS: _____