RECLANATION Managing Water in the West

Categorical Exclusion Checklist

Geotechnical Boring for Caltrans 201 Bridge Widening Project

CEC-15-064

Prepared by:	Stacy L. Hoff Natural Resources Specialist South-Central California Area Office	Date: 2/25/16
Concurred by:	See Attachment A Architectural Historian Mid-Pacific Regional Office Regional Archeologist concurred with Item 8. within the project file.	Date: See Attachment A Their determination has been placed
Concurred by:	Lisa Carlson Wildlife Biologist South-Central California Area Office	Date: 2/25/2016
Concurred by:	Rain L. Emerson Supervisory Natural Resources Specialist South-Central California Area Office ITA Designee concurred with Item 11. Their project file.	Date: 2/25/2016 determination has been placed within the
Approved by:	Michael P. Jackson Area Manager South-Central California Area Office	Date: 2/23/2016



CEC-15-064

Background

The California Department of Transportation (Caltrans) has proposed a project to upgrade a bridge on State Route 201 in Tulare County, California. The bridge crosses the Friant-Kern Canal (FKC). The proposed improvement consists of widening the bridge deck and upgrading guard railings in accordance with modern safety standards.

Caltrans requested a temporary land use authorization from the Bureau of Reclamation (Reclamation) for work on State Road 201 Bridge, as it is located over the FKC. Reclamation completed a Categorical Exclusion Checklist (CEC-14-052) for a land use authorization for the proposed project on August 26, 2015. Since the CEC was issued, Caltrans has requested permission to conduct geotechnical studies within the previous study area in addition to the work that was included as part of the original project description covered in the CEC.

Nature of the Action

Reclamation proposes to issue a temporary land use authorization for Caltrans to conduct 3 geotechnical borings within its right-of-way at approximate milepost 60.95; and approximate Station No. 3315+0640 on the Friant-Kern Canal (see Figure 1). One boring will require drilling through the bridge deck and subsequently through the canal prism and lining into the soil strata. The other two borings will be located behind the bridge abutments. The borings would be done to an approximate total depth below ground surface of 120 feet maximum. The canal boring may be eliminated if the soils encountered near the abutments are significantly similar.

Drilling equipment will consist of a truck-mounted drill rig, water tender, drill crew cab and geologist/engineer vehicles. Two types of drill systems may be employed. They include a (drill-dry) Hollow Stem Auger (HSA) drill system and a (wet) Rotary Wash Wire-line drill system. Drilling fluids (required for the punch core system only) consisting of water mixed with bentonite and/or polymer will be recirculated through a closed system that includes drill pipe, casing, pump, hoses, and a mud tank. The roadway drilling may start with a 6-inch diameter HSA system. Below the water table, the drilling system will be changed over to a 4.5 inch diameter system. Drilling in the canal will be core drilled using a 5 inch diameter drill bit through the bridge deck with outer casing installed through the deck and extended to below the mud line sufficiently (10-15 feet) to ensure containment and recirculation of the drilling fluids. Once the casing is in place, the drill pipe will be installed inside the outer casing and the drilling will proceed to the planned boring depth. The planned depth is until the water table and/or to a depth of 60 feet.

All borings will be backfilled after the drilling and sampling has been completed. The backfill will consist of bentonite chips, tremie bentonite chips for holes deeper than 30 feet, and/or a cement grout backfill if groundwater is encountered. The hole drilled into the bridge will be capped or closed so that a new access for water flow into the canal is not created. All boreholes will be capped or closed according to the parameters set forth in Caltrans *Policy for Borings*, *Borehole Backfilling and Local Enforcement Agency Engagement*¹. The boring would take

¹ Caltrans Policy for Borings, Borehole Backfilling and Local Enforcement Agency Engagement. May 08, 2014.

approximately fifteen working days to complete. Depending on site conditions, including equipment, the work may not be performed in a continuous manner.

There is the potential for delays in travel times resulting from the closure of one lane of traffic while drilling is taking place in the roadway. Caltrans will provide traffic control.

Environmental Commitments

Caltrans shall implement the following environmental protection measures to avoid and/or reduce environmental consequences associated with the Proposed Action (Table 1). Environmental consequences for resource areas assume the measures specified would be fully implemented.

Table 1 Environmental Commitments

Resource	Protection Measure
Biological	A qualified biologist shall conduct pre-construction surveys for the San Joaquin kit fox, its sign and burrows in areas of potentially suitable habitat in the Action Area and within a 200-foot area outside of the project footprint. The survey shall be conducted no less than 14 days and no more than 30 days prior to the initiation of any ground-disturbing activities for the proposed Action. A letter report documenting survey methods and findings shall be submitted to Reclamation at least 5 days before construction. If kit foxes, kit fox sign or kit fox burrows are found during the survey, construction on the proposed Action shall not begin until Reclamation has been contacted and appropriate consultation with the United States Fish and Wildlife Service has been completed.
Biological	Prior to February 15th of the year that the geotechnical work would begin, a qualified biologist shall survey the bridge for swallow nests. If any active swallow nests are found during the survey, no geotechnical drilling shall begin until the young have fledged or until a qualified biologist determines that the nests are no longer active. If no active nests are found during the survey, Caltrans shall install exclusionary netting along the bridge to prevent swallows from nesting in that area. The exclusionary netting shall be removed once the proposed Action is completed. All survey documentation shall be submitted to Reclamation prior to the start of work on the proposed Action.

"EXHIBIT A" CALIFORNIA DEPARTMENT OF TRANSPORTATION STATE ROUTE 201 SOIL BORING PROJECT PROJECT SITE WOODLAKE, CA TULARE COUNTY MP 60.95 FRIANT DIVISION LND-14-23A DINUBA FRIANT KERN CANAL WOODLAKE STATE ROUTE 201 **BRIDGE CROSSING** DODGE AVENUE **AVENUE 384 BORING LOCATION** EA: 06-0H2001 F-KC BRIDGE ID: 0612000157 BR. NO. 46-0065 = BORING 09/17/2015 (Location approximate)

Figure 1. Approximate Project location on State Route 201 in Woodlake, CA where it crosses the Friant-Kern Canal.

Exclusion Category

516 DM 14.5 paragraph D (10): Issuance of permits, licenses, easements, and crossing agreements which provide right-of-way over Bureau lands where the action does not allow for or lead to a major public or private action.

Evaluation of Criteria for Categorical Exclusion

1.	This action would have a significant effect on the quality of the human environment (40 CFR 1502.3).	No ☑	Uncertain	Yes
2.	This action would have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA Section 102(2)(E) and 43 CFR 46.215(c)).	No	Uncertain	Yes
3.	This action would have significant impacts on public health or safety (43 CFR 46.215(a)).	No ☑	Uncertain	Yes
4.	This action would have significant impacts on such natural resources and unique geographical characteristics as historic or cultural resources; parks, recreation, and refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (EO 11990); flood plains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas (43 CFR 46.215 (b)).	No 🗹	Uncertain	Yes
5.	This action would have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks (43 CFR 46.215(d)).	No ✓	Uncertain	Yes
6.	This action would establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects (43 CFR 46.215 (e)).	No	Uncertain	Yes
7.	This action would have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects (43 CFR 46.215 (f)).	No ☑	Uncertain	Yes

8.	This action would have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by Reclamation (LND 02-01) (43 CFR 46.215 (g)).	No ✓	Uncertain	Yes
9.	This action would have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated critical habitat for these species (43 CFR 46.215 (h)).	No	Uncertain	Yes
10.	This action would violate a Federal, tribal, State, or local law or requirement imposed for protection of the environment (43 CFR 46.215 (i)).	No ☑	Uncertain	Yes
11.	This action would affect ITAs (512 DM 2, Policy Memorandum dated December 15, 1993).	No ☑	Uncertain	Yes
12.	This action would have a disproportionately high and adverse effect on low income or minority populations (EO 12898) (43 CFR 46.215 (j)).	No ☑	Uncertain	Yes
13.	This action would limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007, 43 CFR 46.215 (k), and 512 DM 3)).	No ✓	Uncertain	Yes
14.	This action would contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act, EO 13112, and 43 CFR 46.215 (1)).	No ✓	Uncertain	Yes

NEPA Action: Categorical ExclusionThe Proposed Action is covered by the exclusion category and no extraordinary circumstances exist. The Action is excluded from further documentation in an EA or EIS.

Attachment A: Cultural Resources Determination

CULTURAL RESOURCES COMPLIANCE Division of Environmental Affairs Cultural Resources Branch (MP-153)

MP-153 Tracking Number: 14-SCAO-161.001

Project Name: National Historic Preservation Act Compliance for Caltrans Widening SR 201 over

the Friant-Kern Canal – Geotechnical Testing (Continuing Consultation)

NEPA Document: CEC 15-064

NEPA Contact: Stacy Holt, Natural Resource Specialist

MP 153 Cultural Resources Reviewer: BranDee Bruce, Architectural Historian

Date: February 25, 2016

The California Department of Transportation (Caltrans) proposes to upgrade three bridges on State Highway 201, one of which crosses the Friant-Kern Canal (FKC) in Tulare County, California. The FKC was constructed and is owned by the Bureau of Reclamation. The other two bridge crossings are not on Reclamation land, nor do they involve Reclamation facilities, therefore they do not require Reclamation approval. Reclamation designated Caltrans as lead federal agency to act on behalf of Reclamation for the purposes of compliance with Section 106 of the National Historic Preservation Act (NHPA). Caltrans, in coordination with Reclamation, conducted historic properties identification and consulted with the State Historic Preservation Officer (SHPO) on a finding of No Adverse Effect with Standard Conditions to historic properties pursuant to 36 CFR §800.5(b), in March, 2015. SHPO concurred with Caltrans' findings.

In January, 2016, an additional activity to conduct geotechnical investigations related to the project was submitted by Caltrans for review. Reclamation's new action is to issue a temporary land use authorization for the geotechnical work. This activity was not identified or consulted on in the previous Section 106 consultation package that SHPO reviewed in March, 2015. Caltrans reopened consultation with the SHPO on February 16, 2016, describing the proposed new activity and reaffirming that the previous finding of effect would still be appropriate for the project. SHPO concurred with this determination by signing the Caltrans SHPO letter on February 16, 2016 and returning it to Caltrans. Reclamation accepts the outcome of the consultation for the proposed activities on Reclamation land that involve Reclamation facilities.

This document serves as notification that Section 106 compliance has been completed for this undertaking. Provided with this closure memo are supporting documents that conclude the Section 106 process, including Reclamation's email designating Caltrans as lead federal agency, the consultation correspondence between Caltrans and the SHPO from March, 2015, and the consultation correspondence between Caltrans and the SHPO from February, 2016. Please note that if project activities subsequently change, additional NHPA Section 106 review, including further consultation with the SHPO, may be required.

Attachments:

Letter: SHPO to Caltrans dated March 19, 2015

Email: Reclamation to Caltrans dated December 8, 2014 Letter: Caltrans to SHPO dated February 16, 2016

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENVIRONMENTAL ANALYSIS 1120 N STREET P.O. BOX 942873, MS-27 SACRAMENTO, CA 94273-0001 PHONE (916) 654-3567 FAX (916) 653-7757 TTY 711 www.dot.ca.gov



Serious drought. Help save water!

February 16, 2016

Julianne Polanco
California State Historic Preservation Officer
Office of Historic Preservation
California Department of Parks and Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816

FHWA_2013_1220_001 EA 06-0H200 Project ID 06-1200-0157 BOR # 14-SCAO-161

Subject: Finding of No Adverse Effect for the State Route 201 and 216 Bridge Rail Replacement Project; 06-TUL-201 PM 12.4 and 21.2 and 06-TUL-216 PM 18.68.

Dear Ms. Polanco:

The California Department of Transportation (Caltrans) is continuing consultation with the State Historic Preservation Officer (SHPO) regarding the proposed State Routes 201 and 216 Bridge Rail-Replacement Project. This consultation is being undertaken in accordance with the January 1, 2014 First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance With Section 106 of the National Historic Preservation Act, As It Pertains to the Administration of the Federal-Aid Highway Program in California, (Section 106 PA).

Caltrans is acting as the designated federal lead agency for this undertaking. The associated documentation is intended to fulfill Section 106 obligations for this project, including the Bureau of Reclamation's (BOR) permitting actions.

On March 19, 2015 your office concurred with Caltrans' finding of no adverse effect for this undertaking. Since this consultation it has been determined that a geotechnical foundation investigation (boring), which was not previously identified in Caltrans' 106 documentation, will be required.

<u>Description of Geotechnical Foundation Investigation</u>

The geotechnical foundation investigation will include the drilling of three borings, to be located in travel lane and shoulder areas. Two borings will be located behind the bridge abutments and the third boring will be drilled through the bridge deck travel lane between the two bridge piers. The approximate locations of the borings are identified on the attached Boring Location Map. The boring will be drilled to a depth of 120 feet maximum. Considering the relatively short length of the bridge, the canal boring may be eliminated if the soils encountered near the abutments are significantly similar.

The roadway drilling may be done initially using a truck mounted drill-dry (6-inch diameter) hollow-stem auger (HSA) system. Below the water table the drilling system will be changed over to a 4.5 inch diameter self-casing wire line rotary wash with inner core barrel system. Soil sampling will include retrieval of HSA drill cuttings and taking Standard Penetration Test at a minimum of five foot intervals until the water table depth is reached and/or to a depth of 60 feet. Alternatively a self-casing rotary wash wire line system will be used exclusively.

Drilling in the canal will be done using the self-casing wire line rotary wash system exclusively. To facilitate drilling, first the bridge deck will be core drilled utilizing a 5-inch diameter drill bit. Second, a 5-inch outer casing will be installed through the deck and extend to below the mud line sufficiently (10 to 15 feet) to insure containment and recirculation of the drilling fluids. Efforts will be made to identify the deck reinforcement steel locations before choosing the drill-hole location. Once the casing is in place drill pipe will be installed inside the outer casing and the drilling will proceed to the planned boring depth. Sampling will include selectively sampling the inner core barrel and taking Standard Penetration Test (SPT) as described above.

Precautions during drilling will be employed using Best Management Practices (BMP) to mitigate excessive noise, possible equipment leaks, or drilling fluid spillage. They will include plastic tarps, absorption mats, and jute waddles. Also, when drilling in the canal, potential leakage at the casing mud line contact will be monitored. If leakage is detected the wet drilling will be stopped and the casing will be dry drilled to a depth at which leakage has stopped (adequately sealed off). The contained drill fluids generated during drilling will be pumped into 55-gallon steel drums and transported to Caltrans facilities for processing.

After completion of drilling, the drilled hole in the bridge deck will be back filled with concrete. The procedure involves placing a steel plate with wires attached under the bridge deck to cover the drilled hole. The wires are brought up thru the drill hole and attached to two short pieces of rebar that lay on the bridge deck beside the drill hole. Thus the steel plate is held in place. Once the wires are adequately secured to the rebar a concrete mix is poured/placed in the drill hole. The volume used is adequate enough to bring the level of the concrete to the elevation of the bridge deck. After the concrete is cured the wires are cut off at the bridge deck surface. The steel plate is essentially permanently secured to the underside of the bridge.

Conclusion

It is Caltrans determination that the project activities described above would not adversely affect the historic property, Friant Kern Canal, or its contributing feature, the Friant-Kern Canal Bridge No. 46-0065. Impacts to the resource would be minimal and upon completion will be rehabilitated to the Secretary of the Interior Standards. No archaeological deposits have been identified within the APE. Therefore, Caltrans has determined that its finding of No Adverse Effect finding for this undertaking remains valid.

Julianne Polanco February 16, 2016

Please sign below as an indication of you concurrence with the finding noted above and in accordance with Stipulation X.B.2 of the January 1, 2014 First Amended Section 106 PA.

If you need any additional information, please contact me at (916) 654-3567 or kelly.hobbs@dot.ca.gov. Thank you for your assistance with this undertaking.

Sincerely

KELLY HOBBS

Caltrans Section 106 Coordinator

Cultural Studies Office

Division of Environmental Analysis

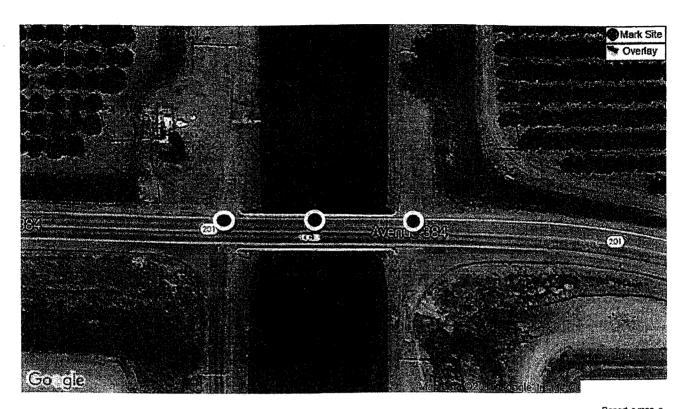
Enclosure: Boring Location Map

2/16/16

Date

Julianne Polanco

State Historic Preservation Officer



Report a map e

BORING LOCATION PLAN

FRIANT - KERN CANAL BRIDGE

BR. NO. 46-0065

O6-TUL-201-pm 21.21

09/17/2015

EA: O6-0H2001

ID: 0612000157

BORING =

9

(Location approximate)

OFFICE OF HISTORIC PRESERVATION DEPARTMENT OF PARKS AND RECREATION

1725 23rd Street, Suite 100 SACRAMENTO, CA 95816-7100 (916) 445-7000 Fax: (916) 445-7053 calshpo@parks.ca.gov www.ohp.parks.ca.gov

March 19, 2015



Reply in Reference To: FHWA 2013 1220 001

Jeanne Day Binning, PhD Chief, Central California Cultural Resources Caltrans, District 06 855 M Street, Suite 200 Fresno, CA 93721

RE: Finding of Effect for the State Route 201 and 216 Bridge Rail Replacement Project; 06-TUL-201, PM 12.4 and 21.2 and 06-TUL-216, PM 18.68; Tulare County, California.

Dear Dr. Binning:

Thank you for your letter of March 18, 2015, continuing consultation regarding the above noted undertaking in accordance with the *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). You are consulting with me regarding effects that the above project will have on the Friant-Kern canal, determined eligible to the National Register of Historic Places (NRHP) in 1997, and for prehistoric site CA-TUL-27, which has been assumed eligible to the NRHP for purposes of this project only.

The California Department of Transportation (Caltrans) is proposing to replace existing bridge rails and widen three bridges by twelve feet at three locations on State Route (SR) 201 and SR 216 in Tulare Country, California. You have submitted the *Finding of No Adverse Effect for the State Route 201 and 216 Bridge Widening and Rail Replacement Project in Tulare County, California* (Caltrans, March 2015); in support of Caltrans' *Finding of No Adverse Effect* for the project. The *Finding of No Adverse Effect* (Caltrans, March 2015) also contained an *Archaeological Monitoring Plan* and *ESA Action Plan* as Appendixes.

Caltrans has determined the proposed construction activities associated with the project at Location 2 (Friant-Kern Canal) are consistent with Secretary of Interior Standards for bridge rehabilitation. Bridge No. 46-0065 will retain sufficient historical integrity to properly convey its historical context as a utilitarian bridge associated with the Friant-Kern Canal.

Archaeological site CA-TUL-27 will be protected from adverse impacts by designation as an Environmentally Sensitive Area (ESA) and the installation of ESA fencing and traffic cones to prevent access to the site during construction. The intact buried stratum within the APE will be protected and marked as a vertical ESA and no excavation will be allowed at that location. Archaeological monitoring by qualified personnel and members of the Native American

community will be conducted for all ground disturbing activities in and adjacent to site boundaries.

Caltrans has determined a *Finding of No Adverse Effect* to historical properties by the proposed project. I concur with Caltrans assessment of effects however, pursuant to Stipulation X.B.1. I find a *Finding of No Adverse Effect with Standard Conditions / ESA Action Plan* for the proposed project to be more appropriate. I have the following additional comments:

- 1. I suggest a procedure should be put in place to disseminate the information regarding cultural resources addressed in the preconstruction meeting to field personnel who did not attend the preconstruction meeting; such as new hires, substitutes, etc.
- 2. The Archaeological Monitoring Plan states that monitoring is not needed on the bank of the Kaweah River opposite from CA-TUL-27 based on information obtained from a geo-archaeological analysis at that location. However, the geo-archaeological study did find an historic trash pit during trenching. It is unreasonable to assume that there is no circumstance that would result in a cultural deposit being preserved. There is also information suggesting that an ethno-historic village was located on the east side of the river at that location. For these reasons, I think that the monitoring area should be extended to the east side of the river where the most earth moving will occur during construction.

If Caltrans agrees with the changes cited above. Please sign at the bottom of this letter and return a copy to me.

Be advised that under certain circumstances, such as unanticipated discovery or a change in the project description, Caltrans may have additional future responsibilities for this undertaking under 36 CFR Part 800. Thank you for seeking my comments and considering historic properties as part of your project planning. If you have any questions or concerns regarding archaeological resources, please contact Associate State Archaeologist, Kim Tanksley at (916) 445-7035 or by email at kim.tanksley@parks.ca.gov. For questions regarding the built environment, please contact State Historian, Natalie Lindquist at (916)445-7014 or by email at natalie.lindquist@parks.ca.gov.

Sincerely,

Carol Roland-Nawi, PhD

State Historic Preservation Officer

eal Total Pair, Ph.D.

Jeanne Day Binning, PhD.

Chief Central California Cultural Resources

Caltrans, District 06



SR 201 & 216 Three Bridges CR Comments

1 message

Perry, Laureen < lperry@usbr.gov>

Tue, Mar 17, 2015 at 8:30 AM

To: philip.vallejo@dot.ca.gov

Cc: Brandee Bruce

bbruce@usbr.gov>, Benjamin Lawrence

blawrence@usbr.gov>

Philip,

This email concerns the designation of lead Federal agency for the State Route 201 and 216 Three Bridges Bridge Replacement Project, proposed in Tulare County, California. One location proposed in the project is on and adjacent to the Reclamation-owned Friant-Kern Canal. Reclamation's undertaking is to authorize work within the Friant-Kern Canal and its adjacent right-of-way for one of the bridges. Although we have been in conversations with Caltrans regarding compliance with Section 106 of the National Historic Preservation Act (NHPA) and were working under the presumption that Caltrans would take the lead for NHPA compliance, we did not formally do this designation.

Reclamation hereby designates the California Department of Transportation (Caltrans) as the lead Federal agency to act on behalf of Reclamation for the purposes of compliance with Section 106 of the National Historic Preservation Act (NHPA) for this undertaking.

We request that your next submission to SHPO includes Reclamation's undertaking and designation of lead agency. If this is not done, then Reclamation will need to consult separately on our undertaking prior to issuing the authorization. Provide us with copies of all SHPO correspondence. Our tracking number is 14-SCAO-161 for reference on correspondence.

Attached are comments on the Draft Finding of Effect document we received from you. Thank-you for the opportunity to comment.

Laureen

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Laureen M. Perry, MA, RPA Regional Archaeologist Bureau of Reclamation Mid-Pacific Regional Office 2800 Cottage Way Sacramento, CA 95825 916-978-5028 916-335-3816 (cell)



Reclamation Review of First Draft 14-SCAO-161.docx 24K