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## CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER

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**Effective Date:** April 27, 2020

**Program Type:** Dredging

**Project Type:** Dams

**Project:** Maintenance Dredging Above Imperial Dam Project

**Applicant:** U.S. Bureau of Reclamation

**Applicant Contact:** Christopher M. Wallis, Chief  
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Reg. Meas. ID:	436347
Place ID:	864219
WDID:	7B133043001
USACOE#:	RGP#62 (SPL- 2009-00496)

**Water Board Contact Person:**

If you have any questions, please call the Colorado River Basin Regional Water Quality Control Board (Colorado River Basin Water Board) staff contact listed above, or (760) 346-7491 and ask to speak with the 401 Water Quality Certification Program Manager.

- Attachment A** Maps
- Attachment B** Receiving Waters, Impact, and Mitigation Information
- Attachment C** California Environmental Quality Act (CEQA) Findings of Facts
- Attachment D** Signatory Requirements
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## I. Order

This Clean Water Act (CWA) section 401 Water Quality Certification action and Order (Order) is issued by the California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Basin Water Board) at the request of U.S. Bureau of Reclamation (Permittee or USBR) for the Project. This Order is for the purpose described in the application submitted by the Permittee. The application was received on January 13, 2020 and it was deemed complete on March 2, 2020.

## II. Public Notice

The Colorado River Basin Water Board provided public notice of the application pursuant to California Code of Regulations, title 23, section 3858 from January 15, 2020 to February 5, 2020. The Colorado River Basin Water Board did not receive any comments during the comment period.

## III. Project Purpose

The purpose of the Project is to maintain the water delivery system from Imperial Dam that serves surrounding communities, so that deliveries may continue to be made through the headworks to the All-American Canal and the Gila Gravity Main Canal. Sediment deposits near the entrance to these canals would constrict and/or prevent the operation and storage capacity of the Imperial Dam facilities. Imperial Dam operations are critical for the year-round delivery of water to over 500,000 acres of farmland, as well as municipalities and military bases in California and Arizona. The maintenance dredging by the Project will remove the sediment deposits. Dredging at this site is routine and recurring, taking place triennially since 1960

## IV. Project Description

Project activities will include dredging operations and sediment disposal. Dredging operations will entail removing approximately 69 acres of material from previously dredged areas 25 feet below the normal high-water surface elevation. The dredge will be launched from an existing boat ramp at Hidden Shores Resort, Arizona. A total area of 69 surface acres are to be dredged, 54 of which are located in California. The dredged sediment will be transported via a temporary hydraulic pipeline to a disposal site upstream of the Laguna Settling Basin. The pipeline will extend from the Imperial Reservoir, passing under State Highway 24, following the Gila Sluiceway to the California Sluiceway, until reaching the disposal site. Retention dikes will be constructed around the perimeter of the disposal area to prevent water runoff from transporting sediment back into the Colorado River.

The Project will utilize a 50-foot buffer zone from Yuma Ridgeway's Rail populations in the area to minimize noise disturbance during Rail nesting season (March 15 through August 1). The Yuma Ridgeway's Rail is a brown marsh bird the size of a chicken. The Yuma race is a federally endangered species found in the marshes of the lower Colorado River, the Salton Sea in California, the Cienega de Santa Clara in Mexico and the Gila River west of Phoenix, Arizona.

The Project is covered under the U.S. Army Corps of Engineers' (USACE) Regional General Permit (RGP) 62, *Bureau of Reclamation Operation and Maintenance Activities for Lower Colorado River*. The current RGP 62 expired on September 6, 2017; therefore, the Permittee sent a letter on January 28, 2020 to the USACE requesting renewal of RGP 62 for an

additional five years. The Project is scheduled to begin in May 2020 and is anticipated for completion in December 2023.

#### **V. Project Location**

The Project site is near the City of Bard in Imperial County, California and located in the Imperial Dam Reservoir at river mile 49.2 on the lower Colorado River in Sections 4 and 9, Township 15 South, Range 24 East, and Section 30, Township 15 South, Range 21 West (Latitude 32.88296; Longitude -114.46393). Maps showing the Project location are found on the Attachment A of this Order.

#### **VI. Project Impact and Receiving Waters Information**

The Project is located within the jurisdiction of the Colorado River Basin Water Board. Receiving waters and groundwater potentially impacted by the Project are protected in accordance with the Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) and other plans and policies, accessible online at:

[http://www.waterboards.ca.gov/plans\\_policies/](http://www.waterboards.ca.gov/plans_policies/). The Basin Plan includes water quality standards, which consist of existing and potential beneficial uses of waters of the United States/state, water quality objectives to protect those uses, and the state and federal antidegradation policies.

Project impact and receiving waters information can be found in Attachment B. Table 1 of Attachment B shows the receiving waters and beneficial uses of waters of the U.S. impacted by the Project. The Colorado River is the receiving water. Individual impact location and quantity is shown in Table 2 of Attachment B.

#### **VII. Description of Direct Impacts to Waters of the U.S.**

The maintenance dredging will remove approximately 69 acres of deposited materials from previously-dredged areas, approximately 25 feet below the normal high-water surface elevation of 183.0 feet. This action will not enlarge, or extend beyond, the existing high-water surface area and depths of previous dredging actions. The floating dredge will be launched from an existing 150 x 150-foot boat ramp located at Hidden Shores Vacation Resort and Marina, Arizona. No vegetation will be cleared and no excavation is required at the launch ramp area. Approximately 15 cubic yards of gravel material would be placed at the launch site below the ordinary high-water mark to stabilize the area and facilitate launching of the floating dredge.

All dredged material will be transported downstream via a temporary hydraulic pipeline to an established disposal site upstream of the Laguna Settling Basin (approximately 87.6 acres), located on the west side of the Colorado River. The USBR will construct retention dikes and earthen berms around the disposal area to prevent runoff back into the river.

Total Project dredge and fill/excavation quantities for all impacts are summarized in Table 2.

#### **Table 2: Total Project Dredge Quantity to Stream Channels**

Temporary Impact <sup>1</sup>	Permanent Impact - Physical Loss of Area	Permanent Impact - Degradation of Ecological Condition Only
54.0 acres 1,950,000 cubic yards --- linear feet	NA	NA

### VIII. Compensatory Mitigation

There are no permanent Project impacts to waters of the U.S.; therefore, no compensatory mitigation is required.

### IX. California Environmental Quality Act (CEQA)

The Colorado River Basin Water Board has determined that the Project is exempt from review under CEQA pursuant to California Code of Regulations, title 14, section 15061. Specifically, the issuance of this Order and the Project described herein meet the exemption criteria under California Code of Regulations, title 14, section 15301 (Existing Facilities) and section 15304 (Minor Alterations to Land). Additionally, the Colorado River Basin Water Board concludes that no exceptions to the CEQA exemptions listed above apply to the activities approved by this Order.

Pursuant to CEQA, the Colorado River Basin Water Board has made Findings of Facts (Findings) which support the issuance of this Order and are included in Attachment C.

### X. Petitions for Reconsideration

Any person aggrieved by this action may petition the State Water Resources Control Board (State Water Board) to reconsider this Order in accordance with California Code of Regulations, title 23, section 3867. A petition for reconsideration must be submitted in writing and received within 30 calendar days of the issuance of this Order.

### XI. Fees Received

An application fee of \$1,949.00 was received on February 3, 2020. The application fee was determined as required by California Code of Regulations, title 23, sections 3833(b)(3) and 2200(a)(3) and was calculated as Category B - Dredging Discharges (fee code 86) with the dredge and fill fee calculator (2020).

Dredging discharge fees are based on the actual amount of material dredged from the waterbody. Therefore, annual active discharge fee invoices for dredging discharge will be sent for the previous fiscal year. The invoice amounts will be based on the fee schedule current for that fiscal year.

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<sup>1</sup> Includes only temporary direct impacts to waters of the state and does not include upland areas of temporary disturbance which could result in a discharge to waters of the state. Temporary impacts, by definition, are restored to pre-project conditions and therefore do not include a physical loss of area or degradation of ecological condition.

## XII. Conditions

The Colorado River Basin Water Board has independently reviewed the record of the Project to analyze impacts to water quality and designated beneficial uses within the watersheds of the Project. In accordance with this Order, the Permittee may proceed with the Project under the following terms and conditions:

### A. Authorization

Impacts to waters of the U.S. shall not exceed quantities shown in Table 2.

### B. Reporting and Notification Requirements

The following section details the reporting and notification types and timing of submittals. Requirements for the content of these reporting and notification types are detailed in Attachment E, including specifications for photo and map documentation during the Project. Written reports and notifications must be submitted using the Reporting and Notification Cover Sheet located in Attachment E, which must be signed by the Permittee or an authorized representative.

#### 1. Project Reporting

- a. **Monthly Reporting:** The Permittee must submit a Monthly Report to the Colorado River Basin Water Board on the 15<sup>th</sup> day of each month for the duration of active dredging activities (approximately 3-4 months). Monthly reporting shall continue until the Colorado River Basin Water Board issues a Notice of Project Complete Letter to the Permittee.
- b. **Annual Reporting:** The Permittee must submit an Annual Report including activities conducted for the previous fiscal year (July 1 – June 30) to the Colorado River Basin Water Board each year on the 1<sup>st</sup> of September. Annual Reports must be submitted even if work on the Project has not begun. Annual reporting shall continue until a Notice of Project Complete Letter is issued to the Permittee by the Colorado River Basin Water Board.

In addition, the quantity of dredged material (cubic yards) for the previous fiscal year (July 1 – June 30) must be reported in the Annual Report. Annual active discharge fee invoices for dredging discharge will be sent for the previous fiscal year.

- c. **Other Reporting:** If pollutants are observed in surface water, the Permittee shall submit a report to the Colorado River Basin Water Board within 30-days after encountering the pollutants and describe actions taken to correct the problem and provide photographic documentation that supports the information in the report.

If repairs are required, the Permittee shall take pictures of the area where work needs to take place, documenting the before and after conditions of the area; and shall maintain a daily log for each site where work is taking place pursuant to this Order, while the Permittee conducts its repair activities. The log shall:

- Provide a general description of the repair work;

- Specify the date and daily starting and ending time for the repair work;
- Note key weather conditions (e.g., temperature, wind speed and direction, precipitation, if any);
- Include notes from visual observations regarding the presence/absence of debris/trash (e.g., discarded filter fiber) and used oil (e.g., oil that leaks from equipment) in the area where the work has taken place.

**Within 30 days following completion of all repair work**, the Permittee shall submit to the Colorado River Basin Water Board a summary report of the key daily log entries. The summary report shall include the above-mentioned before and after pictures of the conditions of the area and shall be signed by the Permittee's Project Manager.

## 2. Project Status Notifications

- a. Commencement of Dredging:** The Permittee shall submit a Commencement of Construction Report at least seven (7) days prior to start of initial disturbance activities.
- b. Request for Notice of Completion of Discharges Letter:** The Permittee shall submit a Request for Notice of Completion of Discharges Letter following completion of active Project activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the Colorado River Basin Water Board staff within 30 days following completion of all Project activities. Upon acceptance of the request, Colorado River Basin Water Board staff will issue a Notice of Completion of Discharges Letter to the Permittee which will end the active discharge period and associated annual fees.
- c. Request for Notice of Project Complete Letter:** The Permittee shall submit a Request for Notice of Project Complete Letter when Project activities and/or any post-Project monitoring is complete, and no further Project activities will occur. This request shall be submitted to Colorado River Basin Water Board staff within thirty (30) days following completion of all Project activities. Upon approval of the request, the Colorado River Basin Water Board staff shall issue a Notice of Project Complete Letter to the Permittee, which will end the post discharge monitoring period and associated annual fees.

## 3. Conditional Notifications and Reports: The following notifications and reports are required as appropriate.

- a. Accidental Discharges of Hazardous Materials:**<sup>2</sup> Following an accidental discharge of a reportable quantity of a hazardous material, sewage, or an unknown material, the following applies (Wat. Code, § 13271):

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<sup>2</sup> "Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis

*(footnote continued on next page)*

- i. As soon as the (A) Permittee has knowledge of the discharge or noncompliance, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, then:
    - first call – 911 (to notify local response agency)
    - then call – Office of Emergency Services (OES) State Warning Center at: (800) 852-7550 or (916) 845-8911
    - Lastly, follow the required OES procedures as set forth in:  
[http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill\\_Booklet\\_Feb2014\\_FINAL\\_BW\\_Acc.pdf](http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill_Booklet_Feb2014_FINAL_BW_Acc.pdf)
  - ii. Following notification to OES, the Permittee shall notify the Colorado River Basin Water Board, as soon as practicable (ideally within 24 hours). Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.
  - iii. Within five (5) working days of notification to the Colorado River Basin Water Board, the Permittee must submit an Accidental Discharge of Hazardous Material Report.
- b. Violation of Compliance with Water Quality Standards:** The Permittee shall notify the Colorado River Basin Water Board of any event causing a violation of compliance with water quality standards. Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.
- i. Examples of noncompliance events include lack of storm water treatment following a rain event, discharges causing a visible plume in a water of the state/U.S., and water contact with uncured concrete.
  - ii. This notification must be followed within three (3) working days by submission of a Violation of Compliance with Water Quality Standards Report.
- c. In-Water Work:**
- i. The Permittee shall notify the Colorado River Basin Water Board at least 48 hours prior to initiating work in water or stream diversions. Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.
  - ii. Within three (3) working days following completion of work in water or stream diversions, an In-Water Work/Diversions Water Quality Monitoring Report must be submitted to Colorado River Basin Water Board staff.
- d. Modifications to Project:** Project modifications may require an amendment of this Order. The Permittee shall give advance notice to Colorado River Basin Water Board staff if Project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority by submitting a Modifications to Project Report. The

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for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. (Health & Saf. Code, § 25501.)

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Permittee shall inform Colorado River Basin Water Board staff of any Project modifications that will interfere with the Permittee's compliance with this Order.

- e. Transfer of Property Ownership:** This Order is not transferable in its entirety or in part to any person or organization except after notice to the Colorado River Basin Water Board in accordance with the following terms:
- i. The Permittee must notify the Colorado River Basin Water Board of any change in ownership or interest in ownership of the Project area by submitting a Transfer of Property Ownership Report. The Permittee and purchaser must sign and date the notification and provide such notification to the Colorado River Basin Water Board at least 10 days prior to the transfer of ownership.
  - ii. Until such time as this Order has been modified to name the purchaser as the permittee, the Permittee shall continue to be responsible for all requirements set forth in this Order.
- f. Transfer of Long-Term BMP Maintenance:** If maintenance responsibility for post-Project BMPs is legally transferred, the Permittee must submit to the Colorado River Basin Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer or designer specifications. The Permittee must provide such notification to the Colorado River Basin Water Board with a Transfer of Long-Term BMP Maintenance Report at least 10 days prior to the transfer of BMP maintenance responsibility.

### C. Water Quality Monitoring

1. General: If surface water is present, continuous visual surface water monitoring shall be conducted to detect accidental discharge of dredging-related pollutants (e.g. oil and grease, turbidity plume, etc.).
2. Accidental Discharges/Noncompliance: Upon occurrence of an accidental discharge of hazardous materials or a violation of compliance with a water quality standard, Colorado River Basin Water Board staff may require water quality monitoring based on the discharge constituents and/or related water quality objectives and beneficial uses.
  1. **In-Water Work or Diversions:** For projects involving planned work in water or stream diversions, a water quality monitoring plan shall be submitted to Colorado River Basin Water Board staff for acceptance at least 30 days in advance of any discharge to the affected water body. Water quality monitoring shall be conducted in accordance with the approved plan.

Sampling shall be conducted in accordance with Table 3 sampling parameters.<sup>3</sup>

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<sup>3</sup> Pollutants shall be analyzed using the analytical methods described in 40 Code of Federal Regulations part 136; where no methods are specified for a given pollutant, the method shall be approved by Colorado River Basin Water Board Executive Officer. Grab samples shall be taken between the surface and mid-depth and they not be collected at the same time each day to get a complete representation of  
*(footnote continued on next page)*

**Table 3. Sample Type and Frequency Requirements**

Parameter	Unit of Measurement	Type of Sample	Minimum Frequency
Oil and Grease	N/A	Visual	Continuous
Dissolved Oxygen	mg/L & % saturation	Grab	Every 4 hours
pH	Standard Units	Grab	Every 4 hours
Turbidity	NTU	Grab	Every 4 hours
Temperature	°F (or as °C)	Grab	Every 4 hours

**2. Dredged Material Evaluation:** Dredged material shall be sampled and tested according to the February 1998 document entitled "Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual (Inland Testing Manual)" under the direction and approval of USACE and U.S. Environmental Protection Agency (USEPA).

#### D. Standard

1. This Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330, and California Code of Regulations, title 23, chapter 28, article 6 commencing with sections 3867-3869, inclusive. Additionally, the Colorado River Basin Water Board reserves the right to suspend, cancel, or modify and reissue this Order, after providing notice to the Permittee, if the Colorado River Basin Water Board determines that: the Project fails to comply with any of the conditions of this Order; or, when necessary to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) or federal Clean Water Act section 303 (33 U.S.C. § 1313). For purposes of Clean Water Act section 401(d), the condition constitutes a limitation necessary to ensure compliance with water quality standards and appropriate requirements of state law.
2. This Order is not intended and shall not be construed to apply to any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to subsection 3855(b) of chapter 28, title 23 of the California Code of Regulations, and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. This Order is conditioned upon total payment of any fee required under title 23 of the California Code of Regulations and owed by the Permittee.
4. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. For purposes of Clean Water Act section 401(d), the applicability of any state law authorizing remedies, penalties, processes, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Order.

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variations in the receiving water. A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring shall be maintained onsite.

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**E. General Compliance**

1. Failure to comply with any condition of this Order shall constitute a violation of the Porter-Cologne Water Quality Control Act and the Clean Water Act. The Permittee and/or discharger may then be subject to administrative and/or civil liability pursuant to Water Code section 13385.
2. Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters as adopted in the Basin Plan by the Colorado River Basin Water Board or in any applicable State Water Board water quality control plan or policy. The source of any such discharge must be eliminated as soon as practicable.
3. In response to a suspected violation of any condition of this Order, the Colorado River Basin Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Boards deem appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. Additional monitoring requirements ensure that permitted discharges and activities comport with any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.
4. The Permittee must, at all times, fully comply with engineering plans, specifications, and technical reports submitted to support this Order; and all subsequent submittals required as part of this Order. The conditions within this Order and Attachments supersede conflicting provisions within Permittee submittals.
5. This Order and all of its conditions contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project. For purposes of Clean Water Act section 401(d), this condition constitutes a limitation necessary to ensure compliance with the water quality standards and other pertinent requirements of state law.
6. The Permittee must comply with the requirements of the applicable Clean Water Act section 404 permit and/or Rivers and Harbors Act section 10 permit.
7. The Permittee shall submit to the Colorado River Basin Water Board a signed copy of the California Department of Fish and Wildlife's Lake and Streambed Alteration Agreement for the Project prior to any discharge of wastes to waters of the U.S./state.

**F. Administrative**

1. Signatory requirements for all document submittals required by this Order are presented in Attachment D of this Order.
2. This Order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code, §§ 2050-2097) or the federal Endangered Species Act (16 U.S.C. §§ 1531-1544). If a "take" will result from any act authorized under this Order held by the Permittee, the Permittee must obtain authorization for the take prior to any dredging or operation of the portion of the Project that may result in a take. The Permittee is responsible for meeting all requirements of the applicable endangered species act for the Project authorized under this Order.
3. The Permittee shall grant Colorado River Basin Water Board staff or an authorized representative (including an authorized contractor acting as a Water Board representative), upon presentation of credentials and other documents as may be required by law, permission to:

- a. Enter upon the Project or compensatory mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records are kept.
  - b. Have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order.
  - c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order.
  - d. Sample or monitor for the purposes of assuring Order compliance.
1. A copy of this Order shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall remain at the Project site for the duration of this Order. The Permittee shall be responsible for work conducted by its consultants, contractors, and any subcontractors.
  2. A copy of this Order must be available at the Project site(s) during dredging activities for review by site personnel and agencies. All personnel performing work on the Project shall be familiar with the content of this Order and its posted location at the Project site.

**G. Best Management Practices**

**Good Site Management “Housekeeping”**

1. Good site management “housekeeping,” erosion control, sediment control, and other dredging-related activities are described in Table 4 below.
2. Turbidity curtains must be used during Project implementation to effectively contain and isolate wastes from dredging and prevent turbidity from streambed sediments outside of the curtained area.
3. All excavated material will be placed in an upland area, away from the Colorado River to prevent discharge into waters of the U.S.
4. After completing dredging activities, any disturbed areas on the banks of the reservoir shall be restored to pre-existing contours and conditions to the extent feasible.

**Table 4: BMPs**

Type of BMP	BMP	Application
Dredging BMPs	Erosion control	Implement erosion control BMPs to mitigate soil erosion, minimize soil loss from wind erosion, and to reduce air pollution during dredging activities for all disturbed areas. Examples: mulch, straw, wood chips, soil application, lot perimeter protection per county standards, bonded fiber matrix or stabilized fiber matrix, physical stabilization erosion control blanket.
	Velocity reduction	Implement velocity reduction BMPs to reduce water/runoff velocity. Examples: energy dissipater outlet protection.
	Sediment control	Implement sediment control BMPs to remove sediment loads from runoff generated within the site for all disturbed areas. Examples: silt fence, fiber rolls, gravel bags, dewatering filtration.

**Table 4: BMPs**

Type of BMP	BMP	Application
	General site and materials management	Implement general site and materials management BMPs for materials and waste management. Examples: material delivery and storage management, spill prevention and control, concrete waste management, solid waste management, sanitary waste management, hazardous waste management.
Post-Dredging BMPs	Protection of channel banks/manufactured slopes	Implement channel protection BMPs to protect banks of the channels as well as the slopes.
	Outlet protection	Implement outlet protection BMPs to reduce discharge/water velocity. Examples: energy dissipater outlet protection, velocity dissipation devices.

**Roads**

5. Work and staging areas and temporary access routes shall be sized, located and flagged to limit potential impacts to natural areas. Previous disturbed areas shall be used to the extent feasible.

**Silt Curtain Deployment**

6. The silt curtain must restrict the surface visible turbidity plume or surface debris to the area of dredging and must control and contain the migration of re-suspended sediments or debris at the water surface and at depth.
7. The silt curtain must be maintained as a full turbidity enclosure. Access into and out of the dredge area shall be taken by temporarily depressing the floating silt curtain and moving vessels over the curtain, allowing the curtain to rise to the surface again once vessels have crossed the curtain.
8. The bottom of the silt curtain must be weighted with ballast weights or rods affixed to the base of the fabric to resist the natural buoyancy of the silt curtain fabric and lessen its tendency to move in response to currents. Where feasible and applicable, the floating silt curtain must be anchored and deployed from the surface of the water to just above the substrate.
9. The silt curtain must be monitored for damage, dislocation, or gaps and must be immediately repaired where it is no longer continuous or where it has loosened.
10. The silt curtain must not be removed until the visible turbidity plume has dissipated and/or surface debris is skimmed and removed.
11. Dredging operations must cease immediately if inclement weather or wave and/or wind action threatens to cause suspended sediment discharges to spread turbidity beyond the area surrounding the dredging equipment on the small barge. The Permittee must take immediate action to ensure that turbidity outside the curtained containment area is kept to a minimum at all times, even in adverse conditions, such as high winds, wave action or currents.

**Placement of Dredged Material Suitable for Beneficial Reuse**

12. Sediment shall be transported to the placement area in a manner that prevents the discharge of material.
13. The Permittee shall visually monitor the disposal operations as well as areas of excessive turbidity associated with the extended boom excavator.

14. Visual monitoring of sediment movement and turbidity levels shall be performed by the Permittee during and after sediment placement.

#### **H. Mitigation for Temporary Impacts**

1. The Permittee shall restore all Project site upland areas of temporary disturbance which could result in a discharge to waters of the U.S.

**XIII. Water Quality Certification**

I hereby issue the Order for the Maintenance Dredging Above Imperial Dam Project, WDID No. 7B133043001, certifying that as long as all of the conditions listed in this Order are met, any discharge from the referenced Project will comply with the applicable provisions of Clean Water Act sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards).

Except insofar as may be modified by any preceding conditions, all Order actions are contingent on: (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the conditions of this Order and the attachments to this Order; and, (b) compliance with all applicable requirements of statewide water quality control plans and policies, and the Colorado River Basin Water Board's Basin Plan and policies.

*Original Signed By*

*4/27/2020*

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Paula Rasmussen  
Executive Officer  
Colorado River Basin  
Regional Water Quality Control Board

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Date

[Not included]

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