March 21, 2013

WDID No. 6B361210006
401 WQC

James Grant
Arrowhead Lake Association
P.O. Box 1119
Lake Arrowhead, CA 92352
Email: jgrant@ala-ca.org

ORDER NO. R6V-2013-0025 FOR CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION, LAKE ARROWHEAD MAINTENANCE DREDGING PROJECT, BLUE JAY BAY, NORTH BAY, AND VILLAGE COVE, ARROWHEAD LAKE ASSOCIATION, SAN BERNARDINO COUNTY, WDID NO. 6B361210006

The California Regional Water Quality Control Board, Lahontan Region (Water Board) has received project information from the Arrowhead Lake Associate (Applicant) and an application filing fee to complete an application for Clean Water Act (CWA) Section 401 Water Quality Certification (WQC) for the Lake Arrowhead Maintenance Dredging Project (Project). This Order for WQC is based upon the information provided in the application and subsequent correspondence received in support of the application.

Any person aggrieved by this action of the Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code (CWC), section 13320, and California Code of Regulations (CCR), title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality, or will be provided upon request.

PROJECT DESCRIPTION

Project details, as presented in the application and subsequent correspondence, are summarized in the following table.

Table of Project Information:

WDID Number	6B361210006
Applicant	James Grant Arrowhead Lake Association P.O. Box 1119 Lake Arrowhead, CA 92352
Agent	James Bellis, Arrowhead Lake Association
Project Name	Lake Arrowhead Maintenance Dredging Project

Table of Project Information:

Project Purpose and Description	The purpose of the Project is to remove excess sediment and restore the inlets of Blue Jay Bay, North Bay, and Village Cove to original topographic contours. The Project is necessary for navigational safety, protection of property, and invasive species and vector control. To dredge the deeper portions of each inlet, an access ramp will be built out into the bay using materials dredged from the shallower portions of the inlet. The ramps will be of sufficient width to allow for the transport of the dredging equipment and will be maintained at a height of at least one-foot above the water surface of the lake. As dredging in the deepest portion of the bay is completed, the access ramp will be removed in sections working back towards the mouth of the bay. During operations, silt curtains will be used to contain the work zone. At each bay, the dredged materials will be placed in a containment facility and dewatered onsite. The containment facilities will be located above the high-water line of the lake and sited such that the draining water will be directed back to the lake. Sediment and erosion control best management practices will be used to contain the spoils and filter runoff. Once the sediments have been dewatered, the materials will be hauled to an offsite location where they will be stockpiled and maintained.
Project Type	Maintenance
Project Address or other Locating Information	Blue Jay Bay is to the southwest where Little Bear Creek enters the lake; North Bay Central is on the northwest side of the lake; Village Cove is to the south where Flemming Creek enters the lake.
Location Latitude/Longitude	Latitude: 34.2499 Longitude: -117.2018 (center, Blue Jay Bay) Latitude: 34.2673 Longitude: -117.2006 (center, North Bay Central) Latitude: 34.2499 Longitude: -117.1844 (center, Village Cove)
Hydrologic Unit(s)	Mojave Hydrologic Unit 628.00; Upper Mojave Hydrologic Area 628.20
Project Area	2 acres
Receiving Water(s) Name	Lake Arrowhead
Water Body Type(s)	Lake
Designated Beneficial Uses	MUN, AGR, GWR, NAV, REC-1, REC-2, COMM, COLD, WILD
Potential Water Quality Impacts to Waters of the United States (WOUS)	Short term increases in turbidity during dredging; potential for downstream erosion, sedimentation, and siltation at dewatering sites.

Project Impacts to WOUS	**Waterbody Type**	**Permanent**			**Temporary**		
		Acres	Linear Feet	Cubic Yards	Acres	Linear Feet	Cubic Yards
	Blue Jay Bay	0	0	0	0.65	631	13,500
	North Bay	0	0	0	0.086	92	1,200
	Village Cove	0	0	0	0.41	212	7,000
	Total - Lake	**0**	**0**	**0**	**1.146**	**935**	**21,700**
Federal Permit(s)	The Applicant has applied for coverage under a U.S. Army Corps of Engineers (USACOE) Nationwide Permit pursuant to section 404 of the CWA (SPL-2012-00774-GS, SPL-2012-00777-GS, SPL-2012-00778-GS).						
Non-Compensatory Mitigation	During construction, the Applicant will follow Best Management Practices (BMPs) including construction stormwater controls designed to minimize the short-term degradation of water quality. The Applicant will utilize silt curtains around the dredge site and will implement the Turbidity Monitoring Plan to monitor turbidity levels outside the containment area(s). The Applicant will also monitor water quality for pH, temperature, and oils and grease both inside and outside of the containment area(s). An effective combination of sediment and erosion control BMPs will be implemented for all dewatering and stockpile locations.						
Compensatory Mitigation	None						
Applicable Fees	$4,199 ($944 base fee + [$0.15 per cubic yard x 21,700 cubic yards]); fees are calculated based volume of dredge						
Fees Received	$4,199						

CEQA COMPLIANCE

The Water Board finds that the Lake Arrowhead Maintenance Dredging Project is categorically exempt from the California Environmental Quality Act (CEQA), pursuant to CCR, title 14, section 15304, Minor Alterations to Land, for the maintenance dredging of three shallow inlets of Lake Arrowhead. The Water Board will file a Notice of Exemption with the State Clearinghouse concurrently with this Order.

SECTION 401 WATER QUALITY CERTIFICATION

Authority

CWA, section 401 (33 U.S.C., paragraph 1341), requires that any applicant for a CWA, section 404 permit, who plans to conduct any activity that may result in discharge of dredged or fill materials to waters of the United States, shall provide to the permitting agency a certification that the discharge will be in compliance with applicable water quality standards of the state in which the discharge will originate. No section 404 permit may be granted (or valid) until such certification is obtained. The Applicant submitted a complete application and the fees required for WQC under section 401 of the CWA for the Lake Arrowhead Maintenance Dredging Project. The USACOE will regulate the Project pursuant to section 404 of the CWA (SPL-2012-00774-GS, SPL-2012-00777-GS, SPL-2012-00778-GS).

CCR, title 23, section 3831(e) grants the Water Board Executive Officer the authority to grant or deny water quality certification for projects in accordance with CWA section 401. The proposed Project qualifies for such WQC.

Standard Conditions

Pursuant to CCR, title 23, section 3860, the following standard conditions are requirements of this certification:

1. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to California Water Code (CWC), section 13330 and CCR, title 23, section 3867.

2. This certification action is not intended and must not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license unless the pertinent certification application was filed pursuant to CCR, title 23, section 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3. The validity of any non-denial certification action must be conditioned upon total payment of the full fee required under CCR, title 23, section 3833, unless otherwise stated in writing by the certifying agency.

4. Neither Project construction activities nor operation of the Project may cause a violation of the Water Quality Control Plan for the Lahontan Region (Basin Plan), may cause a condition or threatened condition of pollution or nuisance, or cause any other violation of the CWC.

5. The Project must be constructed and operated in accordance with the Project described in the application for water quality certification that was submitted to the Water Board. Deviation from the project description constitutes a violation of the conditions upon which the certification was granted. Any significant changes to this Project that would have a significant or material effect on the findings, conclusions, or conditions of this certification, including project operation, must be submitted to the Executive Officer for prior review and written approval.

6. This WQC is subject to the acquisition of all local, regional, state, and federal permits and approvals as required by law. Failure to meet any conditions contained herein or any conditions contained in any other permit or approval issued by the State of California or any subdivision thereof may result in the revocation of this WQC and civil or criminal liability.

7. The Water Board may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (CWC) or section 303 of the CWA, or as appropriate to coordinate the operations of this Project with other projects where coordination of operations is reasonably necessary to achieve water quality standards or to protect the beneficial uses of water. Notwithstanding any more specific conditions in this

certification, the Project must be constructed and operated in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (CWC) or section 303 of the CWA.

8. This certification does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under the California Endangered Species Act (Fish and Game Code, section 2050 et seq.) or the federal Endangered Species Act (16 USC, section 1531 et seq.). If a "take" will result from any act authorized under this certification, the applicant must obtain authorization for the take prior to construction or operation of the Project. The Applicant is responsible for meeting all requirements of the applicable Endangered Species Act for the Project authorized under this certification.

Additional Conditions

Pursuant to CCR, title 23, section 3859, subdivision (a), the following additional conditions are required with this certification:

1. Prior to initiating any excavation or dredging, the Applicant must affirmatively document whether there are any subsurface utilities in the area of construction and submit such documentation to the Water Board. This can be accomplished by: (1) contacting all utilities (both public and private) that provide service in the area, documenting these contacts and submitting such documentation to the Water Board; (2) contacting Underground Service Alert, documenting this contact and submitting such documentation to the Water Board; or, (3) some other equivalent action to determine whether or not there are any subsurface utilities in the area of construction. The area of construction is defined as any area within the Project boundaries where there will be excavation, dredging, or subsurface soil disturbance. **If subsurface utilities are located in the construction area, the Applicant must provide a utility avoidance plan that will be followed during the Project.**

2. Turbidity curtains must be used during Project implementation to prevent sediments from migrating beyond the containment area. These structures must be designed to treat the required volume of dredging and to withstand anticipated wind, current or storm runoff that may impact the operation. These structures must remain in place until the threat of sediment and nutrient transport ceases to exist and suspended materials have settled to approximate pre-dredging conditions.

3. The dredging operation must be halted if inclement weather or wind action threatens to damage the turbidity curtain or allows turbid water to escape from the containment area. The Applicant must take action to ensure that the performance of the turbidity curtain remains effective at all times, even in adverse conditions, such as high winds.

4. Lake Arrowhead is identified in the Basin Plan as a waterbody within the Upper Mojave Hydrologic Area 628.20 and assigned the following beneficial uses: municipal supply (MUN); agricultural supply (AGR); groundwater recharge (GWR); navigation (NAV); contact and non-contact recreational uses (REC-1, REC-2); commercial and sport

fishing (COMM); cold freshwater habitat (COLD); and wildlife habitat (WLD). Water quality objectives and standards, both numerical and narrative, for these surface waters, are outlined in Chapter 3 of the Basin Plan. Implementation of the Project must comply with all applicable water quality standards and prohibitions, including provisions of the Basin Plan. Specifically, the Project must comply with the following water quality standards:

a. Chemical Constituents – Waters designated MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary MCL based upon current drinking water standards.
b. Oil and Grease – Waters shall not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect the water for beneficial uses.
c. pH – In fresh waters with designated beneficial uses of COLD or WARM, changes in normal ambient pH levels shall not exceed 0.5 pH units.
d. Sediment – The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect the water for beneficial uses.
e. Temperature – For waters designated COLD, the temperature shall not be altered.
f. Turbidity – All waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity shall not exceed background levels by more than 10 percent.

5. During the Project, the Applicant will implement the **Turbidity Monitoring Plan** (TMP), prepared by Tom Dodson & Associates, and dated February 2013. The TMP outlines the monitoring locations, monitoring methodology, frequency of testing, and reporting requirements for monitoring lake turbidity levels during the Project. The baseline turbidity of the lake has been established as 1.5 nephelometric turbidity units (NTU); therefore the water quality standard for turbidity is 1.65 NTU. Because short term degradation of turbidity is expected within the containment area, the turbidity water quality standard applies to lake waters outside the silt curtain. Should turbidity levels outside the silt curtain exceed the water quality standard, all work shall be suspended immediately until turbidity levels fall below the 1.65 NTU threshold. Additionally, the Applicant must notify Water Board staff (either in writing or by telephone) within 24 hours of determination of any water quality standard exceedance.

6. During the Project, the Applicant shall also monitor lake waters for pH, temperature, and visual observations for oil and grease. The baseline water quality standards for these parameters will be established for each bay prior to initiating dredging operations, specifically: 1) in fresh waters with designated beneficial uses of COLD, changes in normal ambient pH levels shall not exceed 0.5 pH units; 2) for waters designated COLD, the temperature shall not be altered; and 3) waters shall not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect the water for beneficial uses. Monitoring locations for pH, temperature, and oil and grease shall be established as follows: two monitoring locations shall be established inside the containment area; and one monitoring location shall be established outside the containment area at

distance no greater than 5-feet outside the silt curtain. The frequency of testing and reporting requirements for monitoring these parameters will be the same as that outlined for turbidity in the TMP. The water quality standards for pH, temperature, and oil and grease apply to all lake waters, both inside and outside the containment area. Should water quality monitoring indicate that water quality parameters exceed water quality standards, all work shall be suspended immediately until parameter levels fall below the established baseline threshold. As stated previously, the Applicant must notify Water Board staff (either in writing or by telephone) within 24 hours of determination of any water quality standard exceedance.

7. The Applicant must prepare and implement an **Erosion Control Plan** for each dewatering location as well as for the offsite stockpile location. The plan shall specifically identify the placement and types of BMPs to be used to manage sediment and filter runoff. The plan will include a detailed description for each BMP type including proper installation techniques. A copy of the plan shall be provided to Water Board staff for review a minimum of 5 working days prior to initiating dredging operations.

8. To document the completion of the Project, the Applicant must submit a **Project Completion Report** to the Water Board by **March 1, 2014**. The Project Completion Report should include the following, at minimum: a summary of the dredge and dewatering activities, including the date(s) those activities were performed, and the total volume of material dredged from each bay; a summary of the activities related to turbidity monitoring, including dates, methods used, and a summary of water quality data; photo documentation of the completed Project; and a summary of any activities that deviated from those described in the original Application and supporting documents.

9. No debris, cement, concrete (or wash water there from), oil, or petroleum products must be allowed to enter into or be placed where it may be washed from the Project site by rainfall or runoff into surface waters. When operations are completed, any excess material and/or soil must be removed from the Project work area and any areas adjacent to the work area where such material may be transported into surface waters.

10. All open flow temporary diversion channels must be lined with filter fabric or plastic to prevent erosion and sediment transport.

11. An emergency spill kit must be at the Project site at all times during Project construction.

12. Construction vehicles and equipment must be monitored for leaks and proper BMPs must be implemented should leaks be detected or the vehicles/equipment must be removed from service, if necessary, to protect water quality.

13. The Applicant must permit Water Board staff or their authorized representative(s) upon presentation of credentials:

    a. Entry onto Project premises, including all areas on which fill, excavation or mitigation is located or in which records are kept;

b. Access to copy any record required to be kept under the terms and conditions of this WQC;

c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this WQC; and

d. Sampling of any discharge or surface water covered by this WQC.

14. The Applicant must maintain at the Project site a copy of this Order and a copy of the complete WQC application provided to the Water Board so as to be available at all times to site operating personnel and agencies.

15. The Applicant is responsible for informing any contractors of the specific conditions contained in this WQC Order.

Enforcement

1. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation will be subject to any remedies, penalties, processes or sanctions, as provided for under state law. For purposes of CWA, 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 WQC.

2. In response to a suspected violation of any condition of this certification, the State Water Board or the Water Board may require the holder of any permit or license subject to this WQC to furnish, under penalty of perjury, any technical or monitoring report that the State Water Board or Water Board deems appropriate, provided that the burden, including costs, of the reports must be in reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

3. In response to any violation of the conditions of this certification, the Water Board may add to or modify the conditions of this certification, as appropriate, to ensure compliance.

Section 401 Water Quality Certification Requirements Granted

I hereby issue an order certifying that any discharge from the referenced Project will comply with the applicable provisions of CWA, 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), and with other applicable requirements of State law. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this WQC. A copy of State Water Board Order No. 2003-0017-DWQ is enclosed for your reference.

Except insofar as may be modified by any preceding conditions, all WQC actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the Applicant's project description and the terms specified in this WQC order, and (b) compliance with all applicable requirements of the Basin Plan.

We look forward to working with you in your efforts to protect water quality. If you have questions, please contact Jan Zimmerman, Engineering Geologist, at (760) 241-7376 (jzimmerman@waterboards.ca.gov), or Patrice Copeland, Senior Engineering Geologist, at (760) 241-7404 (pcopeland@waterboards.ca.gov). Please use the WDID referenced in the subject line of this WQC for future correspondence regarding this project.

Patty Z. Kouyoumdjian

PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

Enclosure: SWRCB Order No. 2003-0017-DWQ

cc: Gerardo Salas, U.S. Army Corps of Engineers
(via email, Gerardo.Salas@usace.army.mil)
James Bellis, Arrowhead Lake Association
(via email, jbellis@ala-ca.org)

cc w/o encl: Kimberly Freeburn, California Department of Fish & Game, Inland Deserts
(via email, kfreeburn@wildlife.ca.gov)
Paul Amato, Wetlands Regulatory Office (WTR-8), USEPA, Region 9
(via email, Amato.Paul@epamail.epa.gov)
Bill Orme, SWRCB, Division of Water Quality
(via email, stateboard401@waterboards.ca.gov)

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