

ATTACHMENT 3.3a

COLLABORATIVE AQUATIC INVASIVE SPECIES PROGRAM PLANNING

Grant Type: Planning

Applicant: Tahoe Resource Conservation District

Recommended Funding: \$862,000 (Attachment 3.3b)

Location: Lake wide nearshore environment

Overview

Description of Recommended Action

Staff recommends the Board authorize up to \$862,000 for a planning grant to the Tahoe Resource Conservation District (Tahoe RCD) for the Collaborative Aquatic Invasive Species (AIS) Program Planning project (project).

Tahoe RCD proposes to complete California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and Tahoe Regional Planning Agency (TRPA) environmental review and planning for the control of aquatic invasive plants and warm water fish. The Tahoe RCD will complete the environmental review and permitting process for standard measures known to be effective at controlling warm water fish populations, such as electroshocking. Through the environmental review and planning process, the Tahoe RCD will evaluate new techniques for controlling aquatic invasive plants, including ultraviolet light (UV) technology and site-specific dredging. Additionally, Tahoe RCD will test the effectiveness of new control techniques that target the Curlyleaf pondweed reproductive buds, including the use of acetic acid or hot water combined with bottom barriers.

Tahoe RCD is the lead for the project, but will be working in conjunction with the TRPA and University of Nevada, Reno (UNR) to complete the three tasks described above. The original application included a fourth task, an analysis of the impact of climate change on AIS, which the External Review Team chose not to recommend because,

based on the funding available, it was not as high of a priority for the Lake Tahoe Basin (Basin) as the other three tasks.

AIS plant and warm water fish control efforts result in improvements to water quality, native fish habitat, and recreational opportunities for swimming and boating.

Completion of CEQA, NEPA, and TRPA environmental review will provide significant benefit to Lake Tahoe because it will allow project implementers to increase the pace and scale of AIS control projects.

History

Currently there are two known species of invasive aquatic plants in Lake Tahoe, Eurasian watermilfoil and Curlyleaf pondweed. These species are harmful in Lake Tahoe due to their impacts to recreation, navigation, and ecosystem dynamics. Eurasian watermilfoil was likely introduced to Lake Tahoe in the 1960s or 1970s and was formally identified along the south shore in the late 1980s and 1990s. There are approximately 20 locations with Eurasian watermilfoil, including over 150 acres in the Tahoe Keys. Curlyleaf pondweed was first identified in the south shore of Lake Tahoe in 2003. Since its discovery, this species has spread along the south shore and has outcompeted and replaced infestations of Eurasian watermilfoil in some areas.

More information is required about Curlyleaf pondweed reproduction and growth, which differs from Eurasian watermilfoil, to determine the most appropriate control techniques for this species. Current methods for plant control include the use of bottom barriers and diver assisted hand and suction removal. These methods are effective in the control of rooted plants, but new technologies would target the removal of turions, the reproductive bud of the Curlyleaf pondweed that breaks off and lies submerged. TRCD will analyze the effectiveness of novel management strategies, such as acetic acid or hot water combined with bottom barriers in inhibiting turion growth.

Aquatic invasive plants provide habitat and protection from harmful UV light exposure for invasive warm water fishes. There are several species of warm water fishes, including largemouth bass and bluegill, found in Lake Tahoe. Warm water fishes were first discovered in the Lake in the 1970s and 1980s and have expanded to 12 locations around the Lake. The population size of these fishes is increasing over time, with the majority of the populations concentrated in the Tahoe Keys area. Warm water fishes negatively impact native fishes through predation and competition, which have contributed to the ongoing decline in these native species.

Aquatic invasive plant and warm water fish control are high priorities for the Lake Tahoe Aquatic Invasive Species Coordination Committee (AISCC). In 2009, the AISCC

developed the *Lake Tahoe Aquatic Invasive Species Management Plan (Management Plan)* and updated it in 2014. Tahoe RCD aims to further the enhancement of aquatic habitats in Lake Tahoe by achieving a goal of the *Management Plan*, to limit the spread of existing AIS populations and extirpate existing AIS populations, where possible. In 2015, UNR staff, in collaboration with members of the AISCC, authored the *Implementation Plan for the Control of Aquatic Invasive Species within Lake Tahoe (Implementation Plan)*. The *Implementation Plan* tiers from the *Management Plan* and identifies strategies for AIS removal and control. The *Implementation Plan* supports exploration or development of new strategies or technologies for the control of AIS, recommends increased electroshocking for warm water fish, and highlights the need for more information on the timing of growth and reproduction and the effectiveness of innovative control methods for Curlyleaf pondweed.

Tahoe RCD leads aquatic invasive plant control efforts in the Basin by using current effective methods and testing innovative technologies. Tahoe RCD was also the lead on previous warm water fish data collection projects. Tahoe RCD has the experience to collaboratively and strategically plan and execute environmental review and planning for lake wide plant and warm water fish control projects.

Financing

Proposed Grant Budget

Staff recommends the grant budget as shown below. The budget may be adjusted between line items, but total expenditures under the grant will not exceed \$862,000.

Activity	Cost
Project Administration	\$50,000
Task 1. AIS plant control environmental review and permitting	\$390,000
Task 2. Warm water fish control environmental review and permitting	\$222,000
Task 3. Curlyleaf pondweed control strategy	\$200,000
TOTAL	\$862,000

Proposed Schedule

Upon execution of the planning grant, Conservancy staff will work with Tahoe RCD staff to develop the workplan. The workplan will specifically list the deliverables

supported by the grant. The schedule below reflects anticipated completion dates for major deliverables.

Activity	Subtasks	Date
Project administration		Oct. 2017 – May 2020
Task 1. AIS plant control environmental review		
	1.1 Request for proposals and consultant selection	Nov. 2017 – Feb. 2018
	1.2 Document preparation	Mar. 2018 – Mar. 2019
	1.3 Final documents	Apr. – June 2019
	1.4 Permitting	July – Dec. 2019
Task 2. Warm water fish control environmental review		
	2.1 Request for proposals and consultant selection	Nov. 2017 – Feb. 2018
	2.2 Document preparation	Mar. 2018 – Feb. 2019
	2.3 Final documents	Mar. – Apr. 2019
	2.4 Permitting	May – June 2019
Task 3. Curlyleaf pondweed control strategy		
	3.1 Stakeholder meetings	Dec. 2017 – Feb. 2018
	3.2 Laboratory testing, analysis, and initial results	May 2018 – Mar. 2019
	3.3 Draft implementation strategy	Apr. 2019
	3.4 Draft final report, public review, and presentation	Mar. – Dec. 2019
	3.5 Final report and implementation strategy	Mar. 2020

Authority

Consistency with the Conservancy’s Enabling Legislation, Strategic Plan, and Program Guidelines

The recommended action to award grant funding for this project is consistent with the Conservancy’s enabling legislation, the Strategic Plan, and the Proposition 1 Grant Guidelines.

Consistency with External Authorities

The recommended action is consistent with the Lake Tahoe Environmental Improvement Program (EIP) because it supports implementation of EIP project #01.04.02.0048. It is also consistent with the *Implementation Plan*, which lists Eurasian watermilfoil, Curlyleaf pondweed, and warm water fishes as Tier 1 (highest priority) species with feasible control actions.

Compliance with the California Environmental Quality Act

Pursuant to the California Environmental Quality Act (CEQA) Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), certain classes of activities are statutorily exempt from CEQA or are exempt because they have been determined by the Secretary of the California Natural Resources Agency to have no significant effect on the environment. Pursuant to Public Resources Code sections 21001(f) and 21082, the Conservancy has also adopted regulations to implement, interpret, and make specific, the provisions of CEQA. (See Cal. Code Regs., tit. 14, § 12100 et seq.) Staff has evaluated this Project, and has found it to be exempt under CEQA. This Project qualifies for a categorical exemption under CEQA Guidelines, section 15306 (Information Collection), and the Conservancy's CEQA regulations, section 12102.6. Staff has drafted a notice of exemption (NOE) for the Project (Attachment 3.3c). If the Board approves the Project, staff will file the NOE with the State Clearinghouse pursuant to CEQA Guidelines section 15062.

List of Attachments

Attachment 3.3b – Resolution 17-09-02.3

Attachment 3.3c – Notice of Exemption, Exhibit A

Conservancy Staff Contact

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