

**Lake County Watershed Protection District  
& County of Lake Department of Water Resources  
March 4, 2016**

**Grant Funding Summary 2000-2016**

**Successful Grant Projects**

**2000 EPA Wetlands Grant \$27,039 G, \$36,052 T:** Mapping and assessment of wetland areas around Clear Lake and preparation of a model management plan.

**2001 AB303, Big Valley Groundwater Recharge Investigation Update, \$179,004 G, \$179,004 T:** A project to update the 1967 Investigation to improve understanding of Big Valley aquifer and evaluate current conditions.

**2002 Proposition 13 Stream Monitoring, \$147,182 G, \$203,762 T:** Grant funds not received until 2005, project completed in 2007-2009. The purpose of this project was to monitor gaged streams to develop accurate estimates of mercury and nutrient inputs to Clear Lake. The three gaged sites monitor over 50 percent of the water that flows into Clear Lake. Water quality samples collected at gage sites are analyzed for total mercury, methyl mercury, suspended and total solids, phosphorus, nitrogen and basic water quality parameters. Also conducted mercury hotspot monitoring throughout Clear Lake watershed.

**2003, 2009, 2010 Flood Protection Corridor Program, \$5,214,000 Million G, \$5,214,000 Million T:** Grant program to buyout properties subject to severe repetitive loss due to flooding. The primary location of these property buyouts are in the Middle Creek Flood Damage Reduction and Ecosystem Restoration project area. **Grant amended in 2009 to increase amount to \$5,714,000 and again in 2010 to increase it to \$12,714,000.**

**2003 Proposition 13 Arundo Eradication, \$181,261 T:** The purpose of this project was to inventory, eradicate, monitor eradication efforts, determine the success of natural plant succession following eradication and educate the public on two invasive riparian species of concern, primarily *Arundo donax* and *Tamarix spp.*

**2004 US Forest Service Rural Community Assistance Program, Discovery Center Feasibility Study, \$50,000 G, \$62,000 T:** grant to perform a feasibility study for the Discovery Center. The purpose of the Discovery Center is to develop a center to educate and interpret the natural habitat and cultural history of the region, to provide a destination attraction for visitors, and to enhance ongoing research and monitoring of the Lake County ecosystem.

**2005 AB 303, Lake County Groundwater Management Plan, \$191,000 T:** 100% grant funded project to complete the Lake County Groundwater Management Plan adopted by the BOS in 2006. Project included a water demand forecast.

**2005 US Forest Service Grant, Middle Creek Weirs \$69,678 T:** Grant project awarded to the Robinson Rancheria for the purpose of installing a series of rock weirs in Middle Creek below the Rancheria Road Bridge in Upper Lake. The project caused the creek bed to build up over several years to remove a 4 foot high barrier under the Rancheria Road Bridge. Project facilitated fish passage.

**2008 Flood Mitigation Assistance (FMA) Application, Natural Hazard Mitigation Plan, \$14,255 G, \$64,340 T:** Update to the Lake County Natural Hazard Mitigation Plan. This plan allows the county to qualify for Hazard Mitigation Grant Program (HMGP) from FEMA.

**2010 Cleanup and Abatement Account, Algae Mitigation Project, \$100,000 G:** State funds for the purchase of booms to control algae blooms. County air boat was purchased with this money.

**2012 Cleanup and Abatement Account, \$33,834 G, \$43,597 T:** Purchase 5,000 feet of boom to deflect algae mats away from population and recreation areas.

**2014 Boating & Waterways Ramp Monitoring, \$189,649 G, \$229,689 T:** first round of funding from California Department of Boating and Waterways, funds received to hire up to 10 boat ramp monitors for 2 years for verifying compliance with the Lake County quagga mussel sticker program. Ramp monitors also provide education and outreach activities while on duty.

**2014 Flood System Repair Program, Levee Graveling Project, \$45,638 G, \$5,071 T:** grant project to spread gravel on approximately 1 mile of levee patrol roads in Flood Zone 8 (Upper Lake levees). Grant awarded in 2014, agreement still not received.

**2016 Westside IRWM Group Small Grant Program, Quagga Mussel Boat Display, \$24,500 G, \$45,000 T:** Received small grant to fund the return of the Lake County Quagga Mussel Display Boat from Lake Mead to be preserved and utilized as an education and outreach tool at county fairs, fishing tournaments, boat shows, and other public events.

#### **Grants Obtained by Others with Lake County Staff Support**

**2007 CALFED Arundo Eradication, \$135,335 G, \$212,325 T (Lake County share):** Team Arundo Del Norte a non-profit organization, was the applicant. Project was to eradicate arundo in the Clear Lake watershed.

**2010 Clean Water Act 319(h), Eight Mile Valley Sediment Reduction and Habitat Enhancement Project Design, \$164,975 G, \$176,975 T:** Funding obtained by the Westlake Resource Conservation District, project was to stabilize a new gully formed in 2005 during major storms in the Eight Mile Valley area of Cow Mountain OHV area owned by the US Bureau Land Management.

**2010 Proposition 50, Clear Lake Integrated Watershed Management Plan Update, \$189,300 G:** Westlake Resource Conservation District obtained grant, included watershed analyses for several watersheds in the Clear Lake basin.

**2007 Clover Diversion Weir Modification US Fish and Wildlife Service Grant, \$172,988 G, \$195,423 T:** funding obtained by Robinson Rancheria from USFWS for modification of the Clover Diversion Weir in the Upper Lake flood control project. Weir was lowered in an effort to facilitate fish passage for the Clear Lake Hitch and reduce stream bed gravel loading. LCWPD provided \$22,435 in matching funds.

### **Unsuccessful Grant Applications**

**2003 Consolidated Application, Collaborations and Coordination to Improve Water Quality in Lake County, \$1,066,080 G, \$1,066,080 T:** A group of projects to assess and improve water quality in Lake County. Projects include: complete Clear Lake Watershed Management Plan, expand mercury hotspot monitoring, urban runoff monitoring, citizen monitoring program, outreach to agricultural community, water quality data management and riparian restoration programs. Grant denied as too diverse.

**2007 US Forest Service Rural Community Assistance Program, \$30,000 G, \$47,408 T:** Grant application submitted for the design of construction plans for the Discovery Center per the Feasibility Study conducted in 2004, also with USFS Rural Community Assistance Program. Grant denied.

**2007 Proposition 1E Early Implementation, Middle Creek Restoration Project, \$21,778,889 G, \$62,225,397 T:** A proposal to fully fund the local share of the Middle Creek Restoration Project, including land acquisition, relocation, construction and mitigation. Grant denied as Project is too far from construction.

**2007 Hazard Mitigation Grant Program, Middle Creek Restoration Project, \$750,000, \$1,000,000 T:** A proposal to purchase 8 remaining flood prone homes in Project area. Grant denied. Acquisition funded with Flood Protection Corridor Funds in 2008.

**2007 Clean Water Act 319(h), Clean Lakes Report Update, \$500,000 \$540,000 T:** The Clean Lakes Study Update (Update) will update the 1994 The Causes and Control of Algal Blooms in Clear Lake, Clean Lakes Diagnostic/Feasibility Study for Clear Lake, California (Clean Lakes Study) and improve understanding of Clear Lake limnology and develop recommendations for actions necessary to meet the Water Quality Objectives. Grant denied.

**2007 AB303 Groundwater Management, Update Scotts Valley Groundwater Study, \$242,582 G, \$242,582 T:** A proposal to update the 1970 groundwater study for Scotts Valley to reflect current conditions, document subsidence impact, and evaluate the sustainable yield. Grant denied due to insufficient score.

**2008 BREN School Study Group, Water quality, public perception and sustainable development at Clear Lake, California:** A proposal to have Bren School (UCSB) evaluate the economic impacts of Clear Lake water quality issues on the Lake County economy. Jim Fetzer was project lead. Grant denied, reasons unknown.

**2011 Clean Water Act 319(h), Clean Lakes Report Update, \$125,000 G, \$362,106 T:** An interdisciplinary, collaborative investigation of how harmful cyanobacterial bloom develop, what control the toxicity of these blooms, and how predicted environmental changes will affect the success of key bloom forming cyanobacterial species in the future. Grant denied as not considered implementation (Concept Proposal accepted by State, full proposal developed, rejected by USEPA).

**2011 Clean Water Act 319(h), Middle Creek Restoration Project, \$750,000 G, \$815,000 T:** This Project involves the partial funding of a purchase of reclaimed agricultural land for the purpose of restoring this land to its pre-development use as a wetland. This land is within the boundaries of the Middle Creek Flood Damage Reduction and Ecosystem Restoration Project. Grant denied at concept proposal phase, incomplete project.

**2011 Clean Water Act 319(h), Blue Water Satellite, \$75,007 G, \$81,520 T:** This project will test the usefulness of satellite remote sensing as a planning and management tool for measuring the nutrient phosphorus in Clear Lake and in the stream flows into Clear Lake. Grant denied at concept proposal phase.

**2013 Clean Water Act 319(h), Clear Lake Cyanobacteria Removal Project, \$750,000 G, \$1,000,000 T:** A proposal to remove (harvest) cyanobacteria from Clear Lake for beneficial use. Grant denied as too much planning, removing phosphorus instead of source control, questions over technical soundness, and question over whether sufficient to achieve sufficient phosphorus reduction.

**2013 IRWMP Implementation Grant, Middle Creek Restoration, \$1,000,000, \$1,063,888 T:** A proposal requesting \$1 million funding to acquire approximately 160 acres for a portion of the property acquisition phase, which is currently in progress. Grant denies as not a complete project.

**2013 IRWMP Implementation Grant, Abandoned Well Incentive Program, \$1,205,000 G, \$1,462,050 T:** A proposal for a program to incentivize property owners to properly abandon (plug) wells no longer used to protect water quality. Yolo County, Solano County and Lake County joint application. Grant denied.

**2014 Clean Water Act 319(h), Methyl Mercury Removal Project, \$320,500 G, \$320,500 T:** A proposal to superoxidize methyl mercury in Clear Lake sediments to prevent it from entering food chain. Grant denied over unsure of technology, short term solution, lack of collaboration, and unclear application.

**2014 Clean Water Act 319(h), Tule Mitigation and Replanting Bank, \$595,000 G, \$713,000 T:** A proposal to establish a Tule Mitigation and Replanting Bank. This project will rehabilitate smaller wetlands to serve as a natural filter for sediment entering Clear Lake. Grant denied as vague proposal, lack of long term management and inability to document nutrient reduction from increased wetlands.

**2015 USFWS Invasive Species Program, Quashing the Quagga In Lake County, \$51,843 G, \$248,922 T:** The long-term overarching goal of the project is to educate the public about the consequences of using infested water bodies irresponsibly or unknowingly. Despite the County's significant investment in outreach and education programs, there are many relevant audiences still unfamiliar with the issue. Programs included brochures, the quagga boat and decontamination units. Grant denied.

**2015 Clean Water Act 319(h), Clear Lake Cyanobacteria Removal Project, \$800,000 G, \$800,000 T:** A proposal looking at cyanobacteria as a resource to be removed from the Lake and used as a valuable product. Application pending.

**2015 NRCS Conservation Innovation Grant, Tule Mitigation and Replanting Bank, \$269,500 G, \$539,000:** A proposal for an innovative project to establish a Tule Mitigation and Replanting Bank for Clear Lake. Grant denied.

**2015 Proposition 1 Flow Enhancement Program, Adobe Creek Conjunctive Use Program, \$556,750 G, \$985,650 T:** A proposal for construction funding of Project which would provide supplemental flows for spawning Clear Lake hitch in Adobe Creek and provide additional groundwater recharge for western Big Valley. Grant denied due to "CEQA was unclear" although the application ranked higher than 20 of the 24 funded applications. Note: All funded projects benefited salmonids. **This project was also denied funding in 2001 under Prop 13 and 2005 under Prop 50.**

**2015 Pest Management Alliance Grant Program, Survey and Control Eurasian Water Milfoil on Clear Lake, \$200,000 G, \$318,000 T:** A survey and application project to control Eurasian Water Milfoil (EWM) and hydrilla in Clear Lake to supplement the work of CDFG's hydrilla eradication program. Grant denied.

**2015 Proposition 1 Watershed Restoration Grant, Restoration of Clear Lake Shoreline by Control of Creeping Water Primrose and Replanting with Tules, \$45,674, \$509,303 T:** Development of a program to control invasive creeping water primrose along the Clear Lake shoreline and vegetating the area with native tules to improve shoreline habitats and water quality. Grant denied.

**2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007 Recreational Trails Program, State Department of Parks and Recreation, Highland Springs Trail Improvements, \$4,000-\$73,000:** grant applications to perform maintenance and upgrades of existing trails at Highland Springs Recreation Area. Grants Denied.