

TAdN Steering Committee Meeting
Arundo Eradication and Coordination Program
August 20, 2004
Davis, CA

Introductions

Sharon Weaver will be calling in to conference via phone.

Program updates:

AECP coordinator, Mark Newhouser, provided an update on the program.

Phase I: Database development bridges both phases. All partners will be required to use the database to manage their weed mapping and submit progress reports. We think the new database will simplify and facilitate the data collection process, and hope it will be ready for all new partners by the start of Phase 2.

Program Coordination/Administration: Phase I partners need to be updating their eradication/revegetation plans. Although Phase I is 50% complete time-wise, the amount of Arundo originally targeted was quite modest. The goals originally established have been far-exceeded because most partners have leveraged their resources within agencies and outside in their watersheds. We went through a number of renditions of the database and map server, and now are finalizing that.

We received an extension of time to Phase I (technically it ended on 12/31/03) and additional funds, primarily for program coordination, but also with some funds earmarked for partners whose initial funding was small. This 27-month extension goes through March 26, 2006. It allows for continued eradication, and provides additional time for monitoring. Since monitoring should always be pursued for at least five years, this additional funding makes this possible.

Phase II funding has been approved by CBDA, and we expect to receive written confirmation soon. A private agency will be managing this phase of the program, which is now being financed by state rather than federal funds. Mark wanted to acknowledge everyone who participated in two directed actions with the proposal, which was finally successful.

Bob Hass, AECP information coordinator, reported that the research bibliography on the TAdN website has been expanded significantly, as has the portfolio of potential partners. The Arundo brochure, "Streamside Invader" was revised and reprinted. The Guide for Organizations is almost through a revision, as is the eradication methods spreadsheet.

Mark reported that Phase 2 funding is allowing Deanne DiPietro to join the program staff as its data coordinator. Deanne explained that there will soon be an online map ARC IMS server which will display partner maps of known Arundo infestations with all partner data. We recently worked with a firm to develop it. Now it is ready to go. Hopefully SEC will soon get a high-speed

broadband connection in order to run it. Deanne said the program has found a new database to hold data from partner projects that will better serve our needs. She is working on adapting it to the AECF. Originally partners were using a web-based and paper-based system using online map forms, which was clunky and in some ways unsatisfactory.

Partner Updates:

Dwight Holford/Upper Putah Creek: Arundo component. Working with Lake County WMA. Our grants have 3 years to run, just starting. We are going to use TAdN protocols. Only partnership is through WMA. Has no eradication money, only money to coordinate volunteers and teach them how to do it. In our watershed, it's feasible to expect we'll be able to eradicate Arundo over time. We'll probably start in the fall.

Steve Schoenig: Forest Service made \$500,000 available for weed control in S. Calif. to heal wounds of fire and drought. We ran an RFP, asked for targeted projects. One was to pull together all of Arundo information for Ventura County southward. Jason Giessow applied for part of region. LA County watershed group also applied for their area. Ventura group didn't submit anything, although they are doing pretty extensive mapping anyway. Going to thoroughly inventory everywhere in the south. Cal-IPC mapping committee goal was to pick a few areas to do comprehensive mapping. Although there are a lot of experts in different regions, there is no one map showing Arundo distribution in state. You were talking about creating a map in order to prioritize eradication, rather than just the squeaky wheel getting the most money. Hopefully there will be a more systematic plan in place in the future to fund projects based on greatest need.

Tom Dudley, Univ. of Nevada, Reno: Gretchen Koffman has been doing mapping in Santa Clara River WS. Arundo promoted a fire hazard in the area.

Alex Straessle, Lake County Flood Control District:

WMA got grant through CDFG and is doing mapping at 450 sites, 14 acres. Started out from landowner reports, maybe 30% more than those sites identified now. Through WMA got started on eradication. Only did one treatment so far within 1/5 year. Got Prop. 13 watershed grant. Good complement to AECF grant. Upper Cache Creek, Clear Creek basin down—potential source of infestation for area that is in an ecozone.

Rich Marovich/Putah Creek:

Arundo control near Lake Berryessa, Lake Solano, Pleasant Creek tributary, and scattered populations in-between there. It is in every reach of the creek, more established populations upstream, more incipient infestations downstream. Probably Pleasants Creek was main source of infestation. We've probably eradicated about 25% of the Arundo. Acreage estimates from aerial photos (EDAW) were a bit smaller.

“Glory hole” spills from reservoir—a lot of Arundo slash works its way through the dam. Bare ground where Arundo can take root is helping to spread it. Are

pretty much uniform-sized stands. Most of infestations are older; are comparatively few younger infestations. Willow stands seems to form natural resistance to Arundo. Where new Arundo is coming up, very few stalks. Is hopeful to be getting control in the area, and maintenance phase will be easier. Where we've had wildfires on Putah Creek, this has allowed us to expand our control efforts because some of the stands were easier to reach.

Rodeo is an effective strategy to treat Arundo that is overhanging the water. On upland treatment areas we've been using Fusilade mixed with Roundup—seems more effective—experimenting with this as to how these chemicals operate synergistically. Fusilade effects growing tips, while glyphosate effects roots. Fusilade is a grass herbicide, so following treatment you get a healthy looking stalk with a dead tip. Might include this in future AECP program research.

Mark Newhouser/AECP: EDAW will be working with AECP to secure programmatic permitting. This will make possible addressing not just Arundo, but other weeds, especially since other opportunistic weeds will move in when Arundo is removed.

John Watson/Cache Creek: 14 miles, 3rd year of eradication Have more tamarisk. Using Stalker and Roundup. Probably 80% control first time. Some of rhizomes are 4 feet thick. Also did a foliar application on part of the area without previous cutting, then treating resprouts. In other places, just did a foliar application. Letting resprouts grow 4-6 feet before retreating. About same percent effectiveness with both techniques. Each year get new introductions. BASF submitting product called Habitat.

Erin/CBDA: Think of CALFED as one of many possible funding sources, especially for partners outside of CBDA ecozones. Pulling Together initiative is a good source of funding.

Steve Schoenig: We got five years of funding from this source for Purple Loofstrife. Get federal partners who can advocate for you in selection process. (e.g., Bureau of Reclam. F&WS, etc.)

Rob Hill, Butte County (Grey Lodge): WMA, 92,000-acre preserve already had large Arundo project going. Using helicopters to control because most infested areas are not accessible. Also F&G leases out land to rice growers. Arundo is in streams outside of the preserve, but unless they coordinate with irrigation districts, they don't always perceive Arundo as much of a problem. Alliances with irrigation districts and F&G are not happening. Ag commissioner wants to foster this. Main problem is that F&G staffing is down a lot, so there may be a problem getting use of their helicopter. Inside Gray Lodge, after 3 years of aerial spraying we've gotten pretty good control of the Arundo, mainly using glyphosate, with a little bit of Stalker (depending on location?).

Dwight Holford/Upper Putah Creek: (responded to Rob Hill with his experience). Because of the water quality issues involved with Arundo

infestations, we've been able to fund Arundo eradication through our local irrigation district (Solano County Water Agency).

Todd Adams/Napa Creek:

Third year of Arundo eradication. Recent monitoring of original patches, about 80–90% dead. Will need few years of follow-up. Treated about 85% of mapped area. Having trouble coordinating with CCC, which has gotten cut by two-thirds and lost a lot of crews. We're competing with glassy-winged sharpshooter—one of our challenges is securing resources. Will be using up the last of our Phase I funding. We've found that the optimal time to cut Arundo is mid-August, and spraying in mid-September. When we cut it in September and sprayed in October, we had much less effect because we'd passed the prime time. Need to look at our data more carefully. Hit regrowth when Arundo is 4-6 feet tall (within a month it grows that much).

Rich Marovich/Putah Creek: Got 100% control on 10-foot clumps after one treatment. Temperature seems to be big factor. When it's real hot we get only top kill, working too fast in hot temperatures. Treated in fall, it doesn't come back in spring. We used 2% Rodeo and got some of our best results. Circuit Rider did aerial mapping of entire Napa River watershed, which was very helpful.

Tom Dudley/Univ. of Nevada, Reno: Tamarisk biocontrol: In 2002, one year after introduced beetles, 2 hectares were defoliated. Last year 200. Now the beetles have spread 150 kilometers going into two different watersheds. Some plants dying after three years of defoliation. We're tracking kill rate. Beetles scrape surface of plant tissue, which allows water loss from foliage. While they consume less than 5% of the plant material, this effectively kills the entire plant. Conducting trial sites in 9 different states. It's been working better in cooler climates, so we're now looking at other beetles that do better in warmer climates. Cache Creek in Ca. (Bear Creek) is one of our test sites.

We have begun research work on Arundo biocontrol. Bureau of Reclamation money is currently going to southern France researchers. Starting initial testing overseas, then will be testing 3 yrs. Testing in U.S. will occur after this.

Michael Perrone/CDWR: Looking at increasing tree coverage to deal with weeds.

Sharon Weaver/San Joaquin River: Fresno area, between Fresno and Medeira Counties. Parkway approx. 6,000 acres of green space between the two counties. A lot held in conservancy. Some landowners would like weeds removed, some have history of bad blood with our organization, so don't want to get rid of weeds (political issues). Over past few years, have been working under a grant with the Wildlife Conservation Board to eradicate several invasive weeds on our stretch of river, including Sesbania. In the past have done a little Arundo eradication, but not in recent years. Will need to regear up for Arundo eradication.

Kristin Cooper-Carter/CSU, Chico; Lindo Channel: Arundo eradication projects on several streams in Butte and Tehama County. Lindo Channel is a tributary of Chico Creek. Auburn Area, Lake Clementine, new project. Heavily immersed in Arundo/tamarisk eradication and restoration. Plan on Redbank with active vs. passive test plots to measure amount of active restoration that occurs. Planting plugs, root wads, and cuttings to see which are more effective than natural regeneration in a habitat that is somewhat devoid of natives. Bank stabilization is one issue. Pretty comprehensive plan. Can put on CD for inclusion on TAdN website.

WIMS Database Presentation/Deanne DiPietro

AECP data information coordinator, Deanne DiPietro, provided an update on the program's new database.

The Weed Information Management System or WIMS, is a database developed by The Nature Conservancy that we have decided to adapt for TAdN's own needs and then begin using. Some history on the evolution of a mapping system for TAdN:

- Yr. 2000: First attempt at creation of a mapping protocol and database. Worked out fields, paper forms, GPS methods. Developed a web-based data entry system with centralized database.
- Early 2004: Began development of desk-top database.
- July 2004: Discovered The Nature Conservancy's (TNC) Weed Information Management System, or WIMS. We are now moving forward to adopt it for TAdN's own needs.

WIMS is far superior to the system we were using, and addresses all of TAdN's immediate data management needs:

It allows for easy creation of high-quality data, with flexibility in amount of detail. Additional features can be added in future versions in a partnership with TNC. Multiple groups are using it, and more are considering doing so. This will make it easy to share data across programs.

TAdN will be partnering with TNC and several other agencies, including Cal-IPC, for collaborative development and support. We will be making a few modifications to it, including more detailed landowner and access information, photo monitoring, and adding revegetation as a treatment. We will also be able to generate a greater variety of reports, including cost analysis and efficacy comparisons. The partnership will involve collaborative development, high-quality upgrades, maintaining version control, and coordinated, tiered technical support. Users will receive training and technical support from TAdN, and the TAdN Data Coordinator will be available to help users at every step, if needed. The program will purchase PDAs and GPS units for all partners. It is expected that this improved database will also benefit others in the region who are also involved in invasive weed management, and that it will become a node for serving detailed WIMS weed map data for the Bay-Delta region.

May want to add vegetative analysis training component on estimating plant cover (both for invasives and for *Arundo*) when provide WIMS training. Steve Schoenig recommended an expert in this area in Sacramento who might be able to advise here. Costs to purchase PDAs and GPS units will need to come out of budgets for new partners. Expense will be around \$500.

General Discussion:

Environmental Restoration Program, CBDA, is developing plan for next 3–5 years. In our cursory review, have left invasive plants off of the list. Have mentioned invasive species. Opportunity for us to comment on this draft and make certain attention to weeds doesn't fall through the cracks.

Also new CBDA RFP is out for monitoring and evaluation, but is only funding *existing* projects for monitoring. We can easily justify additional monitoring for the future and get in a proposal for this. Partners will need to be able to project future costs for monitoring.

Dianne Feinstein submitted bill for funding invasive species issues about a month ago.

Action Taken: Steering Committee agreed to adopt WIMS database for the AECF. Being able to standardize data is very important.

Next Meeting: Friday, November 12, 2004, from 9am–12noon. The group agreed that Friday morning works ok for meetings, so long as it doesn't conflict with CBDA watershed meeting on the third Friday of the month.