

## **A Proposal to Develop a Yolo Water Resources Association Metadata Web Portal DRAFT**

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### **Overview and Need:**

Access to current and historic water related information is important to all stakeholders concerned about the management and future of Yolo County's water. Over the next two to twenty plus years Yolo County institutions will be making decisions that will impact the reliability and cost of the water supply, that improve safety from flooding, that benefit or harm ground and surface water quality and that impact how potentially threatened and endangered species recover to sustainable population levels and habitat conditions. Pending or current projects and programs which need public involvement and access to the water-related information include:

1. Yolo County Flood Control and Water Conservation District's application for 95,000 acre feet of additional Cache Creek water.
2. Yolo Water Resources Association's efforts to develop groundwater management and conjunctive use plans.
3. The City of Davis and UC Davis's efforts to secure a supply of surface water from the Sacramento River.
4. The City of Woodland's pursuit of 100 year flood control protection.
5. Current and pending TMDLs for non-point source pollutants (e.g. sediment, diazanon, mercury, nutrients, various pesticides).
6. Yolo County's Natural Communities Conservation Plan and other efforts to protect and restore habitat for current and prospective threatened and endangered species.
7. Flood problems at Madison, Plainfield Station and other rural areas.
8. Potential national or state Wild and Scenic River status for Cache Creek.
9. Yolo-Zamora's groundwater overdraft and its need for surface water supplies.
10. Potential water transfers from county growers and their impact on groundwater supplies and the local economy.

Each of these issues will need historic and newly developing monitoring data, reports, aerial photographs, research studies, historic and pending environment review documentation, GIS layers, maps, and other information. Each issue will benefit from public and stakeholder input throughout the process, not just in the prescribed public comment times as set by law. Because these issues all involve water use within the county, there will be much overlap between the informational needs and the stakeholders' interests in each.

### **The Problem**

There exists no central portal through which stakeholders and project proponents can find and access water and habitat-related information important to the feasibility and environmental analysis of water supply, water quality, flood control and habitat related issues in the Cache Creek watershed and in Yolo County.

Each project will expend significant resources finding and evaluating existing information. Historically, when this has been done in the past, the information obtained by one project is not easily available to a related project. At best, it is found in a bibliography, without even notes about the location of the original material. Thus the next project often has to redo the work that was done with public funds.

Most organizations and projects now have their own websites but lack an easy way for a stakeholder to find which websites have which information without exhausting significant effort to review them all, in all their depth to find relevant information.

Because accessing historic information is expensive, it can be sacrificed in the effort to meet deadlines and produce the required reports and assessments. Consequences include legally indefensible environmental reviews and projects which are not as good and effective as they otherwise would be.

### **Hypotheses**

1. Institutions working to advance water-related projects could enter metadata (data about information) into a web-based database and dramatically improve each others ability to find and evaluate informational resources.
2. The Yolo County Water Resources Association could develop a web portal through which all water related information in the county could be found. The portal would not duplicate the existing websites but would organize categories of information with links to the resources available on the websites of related organizations.
3. University and community college interns could be trained to evaluate information resources and enter high-quality metadata into an instantly accessible database. These interns could be provided to the water-related agencies and projects to enter the metadata and put on-line the most important documents that will be useful to many.
4. Each entity in the County will be able to calculate the potential savings that the ongoing maintenance of a WRA web portal and metadata database could provide them. Each entity could provide annual funding in the form of sponsorships to the ongoing maintenance of the portal and metadata database from the savings they gain. These sponsorships would provide a sustainable base of support for the project.
5. Given the value of the portal, metadata database and well trained interns to each entity, these organizations will allocate staff time so that they will have a representative on a committee that oversees the overall program. This committee would report to the Yolo County Water Resources Association.
6. By using public domain, open-source software to create the web tools, the investment made in this project can be efficiently and cost-effectively utilized by other watershed related projects. The oversight and long term sponsorship portions of the project will also provide important models for how others can create a sustainable program for their watersheds.

### **Proposed Scope of Work**

**Task 1.** *Establish a Committee to prioritize and oversee efforts, make recommendations to the Yolo WRA and provide long-term continuity to the program.*

- a. Invite stakeholders to participate in a series of professionally facilitated meetings that establish the priority goals and screening criteria for and ultimately selects which water-

related resources should be found, entered into the database catalog and/or put on line. This committee reports to the WRA which will make the final decisions.

- b. Within 12 months of the beginning of the CALFED funded project, the committee will recommend to the WRA a sponsorship program which provides each sponsoring entity with quantifiable benefits that exceed the cost of their annual sponsorship.
- c. Within the initial 12 months, the committee will have created a set of policy directions to help them make decisions in the future. These policies will be useful to other watersheds that wish to develop a similar program and set of tools.

***Task 2. Develop the Web Portal and Metadata Database.***

- a. With the committee's oversight, the specific database fields and portal folders and organizational categories will be established.
- b. Using the existing open source metadata database software developed by CERES, the Sacramento River Portal, CALFED and others, a new database and entry tools will be developed for the Yolo County project.
- c. Beta test both the portal and the website using committee representatives and stakeholders. When ready, encourage the public to utilize the resources via a public relations campaign.
- d. Provide ongoing improvements to the software and the portal design as users help provide new information and insights to the project.
- e. Create a documentation folder on the website and publish all background and support information about the portal and database tools so that other watershed groups can make use of them.

***Task 3. Train interns in how to enter metadata and add documents to the portal. Provide these interns to all entities that wish to help catalog the priority water-related information they have in their files and libraries.***

- a. Recruit interns from UC Davis, Sacramento State University, and the local community colleges. Provide a financial stipend and select among them to provide the best to the local participating entities.
- b. Train four sets of eight interns each over the course of 1.5 years. Teach them how to use the software, how to evaluate documents and accurately enter metadata, and how to convert documents to a easy to download, digital form so that they can be placed on line.
- c. Orient the interns to the staff and offices with which they will be working. Provide an on-call service to help them if they or the office staff have technical or policy related questions. Review their work with the office staff and write up a final evaluation of the interns as well as letters of recommendations for those deserving of them.
- d. Provide documentation on all aspects of the internship program so that other watershed efforts can use the knowledge gained from this effort to advance similar programs in their areas.

***Task 4. Write a final report that evaluates the project and makes recommendations on how it can be improved upon by others interested in pursuing similar strategies and goals.***

- a. Provide all participating stakeholders with opportunities at six, twelve and 18 months to evaluate the project. Use a standard evaluation form and provide a summary of the evaluations to the committee and the WRA.
- b. Provide users of the portal and metadata catalog with an online comments and suggestions form. Include a summary of these comments in the six, twelve and 18 month evaluations.
- c. Provide a draft evaluation of the overall project at month 20 and a final evaluation at month 22, at the end of the project.
- d. Post all evaluations on the project website and send the final to CALFED.

**Budget:**

To be determined.