

RDMD WATERSHED PROGRAM REVIEW

Aliso Creek Watershed Study – Lessons Learned

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Submitted to:



County of Orange Resources & Development
Management Department
Watershed and Coastal Resources Division

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Purpose

What is the purpose of this program review and how was it done?

The County of Orange, Resources & Development Management Department (RDMD) is evaluating the value of the County's partnership with the Los Angeles District, U.S. Army Corps of Engineers (Corps) in conducting watershed feasibility studies in Orange County. The County has been the lead local sponsor for six current and past watershed feasibility studies (Aliso Creek, San Juan Creek, Upper Newport Bay, Newport Bay/San Diego Creek, Westminster and Coyote Creeks).

The purpose of the review is to identify problems and constraints that may be impairments to the successful execution of the County's watershed program, and recommend changes to improve program efficiency and effectiveness. In order to gain specific insight into the situation, RDMD elected to evaluate in greater detail the history of the Aliso Creek Watershed Study.

The review was accomplished through a series of three workshops, augmented by information collected from interviews of select individuals (identified by RDMD) that have been involved in past or current study efforts. This report summarizes the information collected during the workshops and interviews, as well as additional information collected from related reports, including federal policy letters and internal agency communications.

In Addition, the County requested an initial Project Management training session for its watershed planners. The information presented during the training is also included in this report.

Background

How did we get here?

Over the last two decades, a number of water related issues in the Aliso and San Juan Creek watersheds have been independently addressed by various public and private entities. How to solve some of the water quality, urban runoff, erosion and habitat degradation issues, both real and perceived, have been fiercely debated. Fingers have been pointed, blame assigned, and litigation threatened, but the health of the watershed has continued to deteriorate.

Many of the smaller routine problems have been addressed by piecemeal projects implemented by local agencies. Many of these projects have been successful, and some have failed. Implementation of effective solutions for some of the larger problems has been constrained by local funding limitations, and conflicting agency jurisdictions and mission statements.

Through time, public and private entities have been frustrated by the continued flooding and erosion damages to infrastructure; water quality that does not meet public health regulatory standards; continued losses in aquatic and terrestrial biological resources; and lost recreational opportunities. Ownership and responsibility to fix the problems that crossed multiple jurisdictional boundaries has not been clear, and prior to a cooperative watershed planning effort, was not being pursued.

To address some of the larger problems, a comprehensive, more holistic study approach was proposed for the Aliso and San Juan Creek watersheds, and pursued through a partnership that involved various local public agencies, utility districts, and the Corps. Since federal matching monies were sought through the Energy and Water Appropriations Bill, the study process was based on the policies and procedures that govern Corps civil works studies and projects. The Los Angeles District Corps office became the lead agency for the Aliso and San Juan Creek watershed studies that were initiated in 1995. Although both watersheds were initially studied together in a single 100% federally funded Reconnaissance phase, more detailed (feasibility phase) studies were pursued independently under two separate cost shared watershed study efforts. These watershed studies were among some of the first of their kind in the nation to be pursued (and funded) by the Corps, with multiple partners sharing some of the cost and work effort. The lessons learned within this report are predominantly based on these two study efforts, with the primary source of information based on the Aliso Creek study.

Since 1995, approximately 23 documents addressing various aspects of the Aliso Creek watershed have been published by the County and Corps. Although many products have been completed, study partners are questioning the effectiveness and direction of current study efforts. There have been budget overruns, schedule delays, misunderstanding of the federal process and procedures, and what the original goals and objectives were versus those which are currently being pursued. Public trust in the competence of the agencies leading the study efforts for the Aliso Creek watershed has been diminished, and blame has been cast in many directions. Rather than continue to conduct more studies of the problems in the watershed, there is an increasing desire to see the immediate implementation of projects. Partners who have provided funding in the past are now considering withdrawing their support.

To correct the situation, RDMD-Watershed & Coastal Resources Division initiated a review of the watershed planning processes pursued to date, with the objective of learning from the successes and shortcomings. Implementation of a new go-forward strategy should yield timely, positive results.

Information Collected and Reviewed

How was information collected and who participated?

RDMD initiated a series of workshops and interviews to solicit input from the various partners and interested public. The information collected from these actions was the basis of the review and recommendations.

Workshops and Interviews

The workshops and interviews solicited information from participants along one or more of the following themes:

- 1) What were the drivers (watershed problems) that were originally identified back in the 1990's and became the basis for the watershed studies?
- 2) What do current study team members believe are the goals and objectives of the watershed study, compared to what was set forth by the initial (1995) study team and documented in the original Reconnaissance Report and Feasibility Cost Sharing Agreement?
- 3) What did we expect to accomplish (and by what date), and how does this compare to what has been done?
- 4) What are the constraints that may have prevented timely progress and the results originally intended?
- 5) What is watershed planning to you, to your organization?
- 6) What are some suggested action items to improve study team performance?

Three workshops were conducted. The first workshop involved internal managers and staff within the various departments of RDMD engaged in activities within the Aliso Creek watershed. The second workshop involved the various cost-sharing partners (public agencies) that have helped fund prior watershed studies. The third workshop involved the Corps, Los Angeles District staff currently engaged in watershed planning throughout Orange County.

Information collected at the workshops was augmented by several interviews of a select number of interested representatives of the general public, as well as past managers of resource agencies with involvement in the watershed.

The information collected during the workshops and interviews, including the list of participants, are summarized in the Appendix.

Watershed Program Reviewed

What can we say about the information collected?

Based on the information collected during the workshops and interviews, there are a number of observations that can be made. This summary highlights the most frequently made comments among the attendees, grouped in to common themes.

What were the original drivers (or problems) that jump-started the watershed planning efforts?

Although many of the attendees at the workshops were not involved at the beginning of the study process, there was general concurrence among the participants that the items listed below were some of the key drivers responsible for initiating the watershed planning process back in 1997.

- Poor water quality throughout the watershed, culminating in beach postings/closures at the ocean outlet
- System-wide creek erosion and degradation, with significant infrastructure damages in the lower reaches
- Federal funding support needed at a time when County funds were limited (following 1994 Orange County bankruptcy, the first of its kind in the nation)
- Poorly coordinated efforts among stakeholders that resulted in piece-meal solutions that were not always effective
- Threat of litigation (flood control/water quality) by property owners impacted by downstream flooding and special interest groups impacted by repetitive beach closures
- Increased press coverage of Aliso Creek issues and the growing public concern over how local government addressed these issues

What were the original goals and objectives (to be accomplished as a result of the studies and by when)?

The expectations of what should be accomplished were fairly consistent among the workshop participants, however, the time it should take to accomplish it varied greatly. The road map on how to get it done varied as well. In general, participants assumed the following would be accomplished:

- Watershed plan completed in about three years (range of expected completion dates from 1999-2001)
- Fully integrated state and federal environmental documents that streamlined the regulatory process during the implementation of projects recommended in the watershed plan

- Federal funding assistance for project implementation/construction (range of expected completion dates from 2001-2007)
- Implementation of water quality and creek stability improvements (2002-2007)
- Improved stakeholder collaboration

What has actually been accomplished?

During the workshops and interviews, it became apparent that many of the participants were not clear on what had actually been accomplished to date. This was in part due to staff turnover at both the Corps and the County, and also because it had been several years since some of the products had been completed. Once a list was completed, many of the participants were surprised at how much had actually been done. Key accomplishments noted include:

- Completed Watershed Master Plan and related engineering/environmental documents (not certified)
- Completed Water Quality Monitoring Plan
- Completed Water Quality Treatment System at JO1P28
- Temporary Water Quality Diversion Project
- County created a Watershed Group to improve coordination amongst stakeholders
- Initiated designs on two “spin-off” projects for restoration and bank stabilization
- Expended significant amounts of federal and local funds on studies
- Created two stakeholder coordination groups
- Secured grants from the state for future studies and projects

Missing from the “accomplishments list” was progress related to project implementation (construction) to address some of the drivers that began the process approximately 10 years ago.

What constraints have been limiting factors for greater success?

- Leadership role undefined for the various activities underway (who is responsible for what?)
- Stakeholder meetings need focus (agendas, progress reports, crowd/sniper control, action items, follow up) and should be set around key milestones rather than monthly
- Too many promises by past agency representatives that could not be realistically delivered, resulting in credibility issues
- Local regulatory agency pressure to address water quality issues has overshadowed the need to address creek stability problems

- Corps role, policies and procedures for conducting watershed planning are not well defined, nor explained to local sponsors, leaving it unclear as to what the Corps will or will not fund for studies and projects, and what their role will be (lead or participant)
- Corps and County technical staff, local cost-sharing partners and NGO's, all have varying opinions on what watershed planning is, or should be. Personal education complemented by work and life experiences, determines how each person is centered on this topic. Lack of a formalized agency position leaves room for interpretation at the individual level, which can lead to confusion with changing personalities at the table or leading the effort
- Project management skills need to be enhanced (including financial management, communication, task management, conflict resolution)
- Turnover and staffing changes at the County and Corps, combined with poor transition planning and a lack of knowledge of previously completed work, has impeded progress
- Too much focus on Corps partnership only, not enough emphasis on need to branch out and implement solutions with other federal partners and funding mechanisms (such as the Environmental Protection Agency, Bureau of Reclamation, Natural Resource Conservation District)
- County and Corps are not speaking with a unified voice or position on issues (or solutions) related to the watershed. For example, the recommended plan for stabilization of the creek is being challenged by some team members as no longer viable, but not all parties agree to this changed assumption and mixed messages are presented to stakeholders
- Overlapping (and often conflicting mission statements within the same agency), personal agendas and biases, blame for past sins, and changing priorities, all impede communication, teamwork and ownership
- Lack of focused "local" political strategy that has broad support and directs state and federal support.. For example, funding requests are pushed through legislative bills but no text language is tied to this dollar requirement that prioritizes the goals and objectives of local interests, and sets firm timelines for implementation of this legislative directive
- County and Corps executive management need to be more engaged, committed and supportive of the study/project team efforts. Departments/Project Managers need guidance on priorities and level of authority
- Unclear what is "the plan" versus "the project(s)", and what are the priorities, dependencies and timing of actions required to successfully restore the watershed

Summary and Recommendations

By commissioning this review, the County of Orange, RDMD Watershed & Coastal Resources Division, has chosen a proactive approach to assessing the course of the current program, and if appropriate, making the necessary adjustments to improve overall performance of the various watershed initiatives within their jurisdiction. Success will require buy-in from internal management, and better commitment and follow through at the Corps federal partnership level.

Over the past 10 years, the level of investment and cooperation has been significant, and the public involvement and technical studies completed to date are sound. There is an immediate need to fast-track final design efforts and implement projects that are consistent with the original needs and solutions documented in the “watershed plan”. By “turning dirt” and reversing negative watershed trends, credibility will be restored among the agencies involved and their public peers.

To position for success, the following recommendations are being made:

I. Aliso Creek Corps/County Study Team Recommended Actions

1. Develop a go-forward strategic plan for the various elements to be completed in the next 5 years. This should include a network of activities that lists priorities, dependencies, leads
2. Establish clear protocol for public involvement and study team meetings. This should be a communication plan that outlines protocol for conducting meetings, (defines attendees, meeting frequency, and routine agenda items), press releases and progress reports.
3. Review previous recommendations made in the “Watershed Plan” and provide community leadership (and serve as a catalyst) for the implementation of local volunteer projects and local government sponsored solutions. Seek state and federal grants to implement small community based projects consistent with the plan.
4. Take a lead role in revisiting the Aliso Creek main stem restoration plan and facilitate the completion of a “value engineered” effort to refine design attributes to soften the project features and lower construction costs. Refined plan should provide the same (or greater) level of project outputs as originally intended.
5. Explore opportunities to “fast-track” the completion of a feasibility phase planning document that can be used as the basis for seeking future federal authorization and appropriations (including credits and reimbursements if appropriate). Define how current federal appropriations can be used to complete select technical studies to advance the project (Geotechnical, State and Federal Environmental Documents)
6. Explore private-public partnerships and mitigation strategies for future development that help fund and implement select aspects of the watershed plan (removal of invasive species,

removal/modification of upstream drop structures, restoration of riparian corridor, implementation of innovative storm water treatment technologies, etc.)

7. Develop a website and maintain it to provide greater public access to completed documents and available technical data
8. Establish Corps/County Executive Committee that involves high level management participation in the final phases of the Aliso Creek effort, with clear milestones, commitments and ownership of action items
9. Hold quarterly brown bag lunches with other County division/department representatives to go over Aliso Creek watershed activities
10. Have some fun in the creek (Aliso Creek fund raisers, school field trips, connect the public back to the creek)

II. Corps Management Recommended Actions

1. Continually educate local sponsors on federal programs and procedures through updated handbooks and seminars
2. Invite a broader range of local sponsors to participate in the Corps Los Angeles District annual Planning Workshop
3. Commit to a regular schedule for study team meetings, executive management meetings, and public meetings, that are mutually agreed upon with the local sponsor
4. Establish protocol and procedures for addressing staffing changes (at the Corps or County) that affect project management responsibilities and technical team participants. This should address requirements for advance coordination and mutual concurrence by both the Corps and local sponsor prior to the implementation of changes
5. Revisit and clearly define the roles, responsibilities, and priorities of the various watershed participants in the implementation of the "watershed plan".
6. Require current District staff to revisit the original watershed problems and opportunities that were the drivers for the formulation of alternatives, and level of detail and analysis (and design assumptions) that were made in the development of the project concepts identified in the watershed plan
7. In the absence of detailed national guidance (and training) on how to conduct Corps watershed studies, establish tighter local District controls to limit individual biases and preferences that may influence the direction of the study, and result in redirection of study team priorities with changes in staffing through time
8. Corps documentation of the study process can be extensive and intimidating to non-federal agencies and the interested public. The Corps should strive to educate these parties (that are not accustomed to seeing this kind of technical detail) as to why this is required from the federal perspective. A more user friendly (summary report) edition) should be made available for targeted audiences

9. Clarify for the local sponsors and public the Corps federal interest (and level of participation) in projects that address water quality. Local agencies need to have a clear understanding of what water quality issues can and will be addressed when projects are formulated under Corps regulations. PM's and technical study team members from both the Corps and County must understand and clearly convey to the public what the primary and secondary project purpose (and benefits) are for any recommended plans
10. Update and maintain a website (Corps or linked to County) that makes available public documents, updated schedules, points of contact, meeting announcements and post meeting summary reports

III. County Management Recommended Actions

Internal

1. Define the roles and responsibilities of the various County departments/divisions that have jurisdiction within each watershed. Define and support the role of the Watershed PM. Establish protocol for succession planning to mitigate impacts of staffing changes on the watershed studies
2. Revisit, update, and clearly define the mission statement for the Watershed & Coastal Resources Division. Define the "watershed planning approach" from the County perspective, and ensure that all departments and divisions are aware of it and support it
3. Establish inter-departmental MOU's for how to handle watershed based actions that cross multiple departmental jurisdictions (including assigned points of contact, ground rules for the form and frequency of communication, and decision making authority)
4. Establish County leadership role for organizing volunteer groups and schools to implement certain aspects of the watershed plan
5. Support and train PM's to improve their knowledge base of federal processes (including legislation, program policies and procedures)

External

1. Define partnership and legislative priorities with not only the Corps, but other federal and state agencies that have programs to address watershed issues
2. Develop a "strategy for short-term successes" to rebuild customer satisfaction and public trust that substantive progress can be made. The plan should have short-term actions that complement longer term solutions
3. Develop innovative methods for advancing projects to the implementation phase (for example, the County taking over responsibility for advancing work that the Corps can not complete in a timely manner, and seek credit and reimbursements through legislative actions in the Water Resources Development Act and/or Energy and Water Development Appropriations Bill, and/or in the Corps Project Cooperation Agreements)
4. Clarify the plan of action and prioritize commitments to resolve water quality and river stability issues with affected/interested local government entities,, utility districts and non-government organizations

5. Pursue actions necessary to complete a fully integrated state and federal environmental document that is supportive of the “watershed plan”. There should be renewed interest in pursuing regulatory efficiencies (swift permit actions from the Corps and Regional Water Quality Control Board when implementing watershed project elements that are consistent with the overall watershed plan)
6. Develop and implement a well defined public involvement strategy and ensure that staff and department managers adhere to it

IV. County Watershed Project Management Recommended Actions

1. Establish a “certified” Project Management (PM) training program that addresses skill sets in communication, facilitation/conflict resolution, technical study execution and documentation, project scheduling, budget management, and quality control/assurance
2. Acquire standardized scheduling software that can print out simple progress reports for stakeholder and executive management briefings (Microsoft Project or other similar software)
3. Establish a “scheduler” position (or outsource requirement) within the Watershed and Coastal Resources Division to maintain project schedules (tracking milestones and funding expenditures) under the direction of the PM’s
4. Empower each PM with a well defined level of authority in managing issues not only within the Watershed Group, but also across departments within the County. Ensure that the PM is clear on what the “mission statement” is for the Watershed & Coastal Resources Division
5. Require all County departments to include the Watershed PM in communications and decisions related to their designated watersheds
6. Require all PM’s to generate quarterly progress reports of funds expended, and the earned value of milestones achieved
7. Require all PM’s to not only map out a work plan for the current phase of study, but for the various actions through time that need prioritization or have dependent actions in order to be achieved
8. Require all PM’s to read relevant previously completed watershed reports
9. Require all PM’s to maintain a reference library of applicable federal guidelines, policies and procedures
10. Each PM should define their “customer base” and seek regular feedback on the services provided