

# CONFLICTS IN RIVER MANAGEMENT: A CONSERVATIONIST'S PERSPECTIVE ON SACRAMENTO RIVER RIPARIAN HABITATS—IMPACTS, THREATS, REMEDIES, OPPORTUNITIES, AND CONSENSUS<sup>1</sup>

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*Abstract: The Sacramento River's historic riparian habitats have been reduced by over 98 percent due to cumulative, adverse human activities. These activities continue to jeopardize the remaining riparian habitats. The results of these trends is more endangered species conflicts and listings, coupled with less fish, beautiful scenery, and other resource values. This paper provides a conservationist's perspective on how these resource losses could be stopped, and eventually reversed, through a combination of less-damaging bank protection methods, reliable mitigation for unavoidable impacts, willing seller acquisitions, and restoration projects. A consensus approach is suggested which could expedite conservation measures while reconciling landowner, local government, and flood control concerns.*

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As the only representative of a private conservation group participating on this conference's plenary session panel, I will provide a conservationist perspective on Sacramento River riparian habitat problems and how to solve them. I believe that the Sacramento River is an ideal subject for this panel, based on my work to protect its riparian habitats over the past several years. This river exemplifies many of the most difficult challenges facing riparian conservation, such as resolving flood control, local government, and landowner concerns. At the same time, it also offers many exciting opportunities, such as identifying better bank protection methods, improving mitigation, and working cooperatively with landowners. But first I want to give an overview.

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## Impacts

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In 1848, the Sacramento River had an estimated 800,000 acres of riparian forests. Early explorers described jungle-like forests extending up to 1 mile in places on each side of the river. Today, only about 12,000 acres—less than 2 percent—remain. Except for a few dense stands, much of the remnant habitats are relatively small, narrow, scattered bands along portions of the river. The historic habitat losses contributed to an estimated 80 percent reduction in fisheries, and to

the growing list of endangered, threatened, rare, and candidate species. These habitat losses were primarily caused by agricultural conversion, water development, bank protection and flood control projects, and urban growth.

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## Threats

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Unfortunately, the causes of past habitat losses continue, and the Sacramento River's dwindling riparian habitats (and their endangered species and fisheries) remain in jeopardy. Over 80 percent of the remaining habitats are in private ownership and might be lost to agricultural conversion or other development (USFWS, 1984). An ambitious Army Corps of Engineers and State Reclamation Board flood control project is getting underway which may result in over 20 miles of additional rip-rap bank protection (USACE, 1987a). Another massive rip-rap project is on the horizon: Phase III of the Sacramento River Bank Protection Project. The infamous Chico Landing to Red Bluff Project, or some scaled-back version, may be resurrected.

Meanwhile, the U.S. Bureau of Reclamation is promoting new water marketing and contracts. This involves selling more water for off-stream uses which may adversely alter river flows and encourage conversion of habitats to agriculture. There are many more threats, including a proposed City of Redding in-river hydro project, huge water diversions and fish losses by the Glenn Colusa Irrigation District, and ongoing pollution and unscreened river water pumps.

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## Remedies

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Federal, state, and local government agencies are responsible for many of the most serious past habitat losses, as well as for proposing future projects with additional, significant impacts.

Overall, taxpayers have subsidized far more riparian destruction than riparian conservation. This is especially true with respect to government-sponsored bank

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protection and flood control rip-rap projects, water development and marketing, and agricultural programs.

It is ironic that the cause of these problems must ultimately be the source of any solutions. In other words, the riparian "remedies" lie in changing the instrumentalities of our democracy from riparian destroyers to riparian conservers and restorers. The foundation to accomplish these changes is already established through public support and existing environmental laws. Many public opinion polls in recent years demonstrate overwhelming and growing public support for increased conservation of wildlife and other natural resources. Most people know that we are losing ground in saving endangered species and maintaining the natural diversity and abundance of our native species. Most people also are frustrated that government has not been more effective in reversing these sad trends. For example, when the legislature failed to allow any environmental acquisition bonds, Californians enthusiastically rallied together in 1987 to qualify and in 1988 to pass (with over 65 percent approval) Proposition 70, a \$776,000,000 initiative bond measure for wildlife, parks, open space, and coastal protection.

This public support and awareness is reflected in many federal and state environmental laws. These laws include the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), California Environmental Quality Act (CEQA), and California Endangered Species Act (CESA). These laws could be potent tools to protect riparian habitats, but they have generally not yet lived up to their intent or potential due to lax government compliance. The overall purpose of these laws is to protect and restore listed species; to pursue less-damaging alternatives to projects posing significant adverse impacts; and to fully mitigate any unavoidable adverse impacts.

These laws apply whenever government agencies propose a discretionary project or program. There are procedural and substantive aspects to comply with these laws. Procedurally, documents are prepared, circulated, reviewed, and adopted. Substantively, the document process is supposed to result in more environmentally enlightened government actions. Too often, the agencies become adept at fulfilling the procedural requirements, while justifying the status quo. Thus, government agencies must keep the substantive "heart" of these laws uppermost in mind; to wit, they have a duty to honestly pursue less-damaging alternatives and to fully mitigate adverse impacts. They must also not jeopardize any listed species or their critical habitats. Meanwhile, the public must learn to distinguish between voluminous paper shuffling and tangible improvements in government actions.

The Sacramento River Bank Protection Project (SRBPP) involves ongoing rip-rap construction which

destroys riparian habitats along portions of the Sacramento River. The SRBPP is jointly-sponsored by the U.S. Army Corps of Engineers and the California Reclamation Board. I believe the SRBPP offers a relevant example of problems in achieving substantive compliance with environmental laws. I have monitored SRBPP environmental documents and decisions over the past few years. Most of this monitoring has been painful and frustrating because of the substantial "credibility gap" between what SRBPP documents say and what actually occurs.

While the procedural quality of SRBPP environmental documents has markedly improved in recent years, there has not been a corresponding improvement in SRBPP decisions and actions. Less-damaging alternative bank protection methods are considered in detail, but most are never tried. The Corps has a special aversion to using "experimental" methods. This leads to an obvious "catch-22." The Corps reasons that since rip-rap has been used historically it is economic and effective. Alternative methods have not been used so they are "experimental" and therefore likely to be more expensive and less effective. Of course, the only way to break this stalemate is for more use of alternative methods to determine their genuine costs and effectiveness. One alternative method, the "palisades", is being tested at one site. This is a positive step, but additional "palisades" sites are necessary to gain data under a variety of river conditions.

Aside from giving alternatives short shrift, there has also been an appalling SRBPP history of glacially-slow, inadequate, and illusory mitigation for rip-rap habitat losses. Phase I of SRBPP was constructed over a decade ago, but there has not yet been any mitigation. Government agencies are now in the process of resolving what Phase I mitigation should occur and where. Congress appropriated \$1,000,000 in 1987 for Phase I mitigation, and some encouraging work is underway. But it will be more months and perhaps years before the Phase I mitigation outcome is known.

For SRBPP Phase II, conservation "Right 8" easements were acquired to provide mitigation. A 1987 U.S. Fish and Wildlife Service (FWS) study found that only 32 percent of these easements had high-value habitat, while 21 percent were moderate, and 46 percent were low in value (USFWS, 1987). On 82 percent of these easements, adverse management practices were preventing habitat restoration. In essence, most of these easements were not enforced, nor were they fulfilling their promised level of habitat mitigation.

In recent meetings and environmental documents, the Corps and Reclamation Board have promised to do a better job in providing mitigation, including improved management of the "Right 8" easements. It is too soon

to determine if most of these latest promises will be kept. But there are already both some negative and positive signs.

On the negative side, despite my repeated requests for firm written commitments, the Corps and Reclamation Board still refuse to specify if, when, or how they will post, monitor, and enforce the "Right 8" easements to correct problems identified in the 1987 FWS study, ensure easement compliance, and encourage habitat restoration.

Other unresolved issues relate to whether the new mitigation team has a specific itinerary for informing all relevant landowners and local reclamation districts of easement problems; what role FWS, the California Department of Fish and Game (DFG), and perhaps other government or private parties might play in better managing these easements and restoring habitats; and whether necessary staff and funds will be provided to do promised mitigation work.

Another problem arose when a post-construction inspection of a rip-rap project found that riparian trees were destroyed despite approved environmental documents which promised to retain them. The Corps' response to this shocking revelation appears to be "so what." They state that circumstances change, and they may need to deviate from promises in approved environmental documents (Scholl, 1988). Circumstances do change, but the solution lies in providing more up-to-date and accurate environmental documents. If the Corps' cavalier attitude continues, it will cast further doubt on the integrity of environmental documents and widen the already large "credibility gap."

On the positive side, Congressman Vic Fazio, Assemblyman Patrick Johnston, the State Lands Commission, FWS, DFG, EPA, and others have worked to correct mitigation deficiencies. For example, Congressman Fazio's work was pivotal in achieving the federal funds for Phase I SRBPP mitigation. It is hoped he will continue to press for mitigation reforms. Assemblyman Johnston pushed legislation to transfer management of mitigation easements to DFG. At this writing, the Department of Water Resources and Reclamation Board oppose this

legislation but negotiations toward a possible compromise are underway. The State Lands Commission prepared and executed a new master lease governing Sacramento River rip-rap projects. This lease contains many welcome environmental conditions. However, the State Lands Commission must remain vigilant, because the strength of this new lease will depend upon the degree of monitoring and enforcement.

It is difficult to balance these negative and positive signs, and speculate on whether mitigation will remain

"too little, too late" or become reliable and effective. I can only hope that as more people become aware of these problems, there will be ever-growing pressure to solve them. I also hope that the recalcitrant government officials, particularly some Corps higher-ups and engineers, will come to realize that: they are taxpayer-subsidized public servants; the public wants timely and effective mitigation; the relevant laws encourage such mitigation; and poor mitigation will only hasten endangered species conflicts, "jeopardy opinions", and more environmental legislation and litigation. The influential farmers who promote rip-rap to protect their investments and perhaps increase their property values should likewise recognize that adequate mitigation is fair, reasonable, and ultimately in their self-interest.

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## Opportunities

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At this juncture, I will figuratively shift from reverse (how government is destroying riparian habitats) to forward (how government is protecting riparian habitats). Some very exciting progress has occurred with respect to acquiring and protecting Sacramento River riparian habitats.

In September 1984, the FWS released a study documenting the importance of Sacramento River riparian habitats, the threats to these habitats, and made recommendations for habitat protection. A broad coalition of environmental, wildlife, sportsmen, fishing, and other groups then urged Congress to establish a new Sacramento River National Wildlife Refuge (SRNWR). In 1986, Congress gave FWS \$150,000 and authorized a SRNWR feasibility study. The overall purpose of this study was to determine whether this refuge could be compatible with flood control and landowner concerns. In October 1987, FWS presented the study to Congress. The study found that the SRNWR was feasible, and could be established consistent with flood control and landowner objectives. The study include a FWS commitment that only willing seller refuge acquisitions would occur, and FWS would work on a site-specific basis with the corps and Reclamation Board to allow necessary flood control work. The study identified 66 riparian habitats sought for preservation between Colusa and Red Bluff, and ranked these habitats in four categories. The study estimated it would take between fifteen and twenty million dollars over the next five years to achieve the recommended refuge acquisitions.

In December 1987, Congress appropriated \$1,000,000 to initiate SRNWR willing seller acquisitions. At this writing, FWS is preparing the necessary environmental document for public review. This year Congress is considering additional SRNWR appropriations. Perhaps another \$2,000,000 will be available in FY 1989. Despite

this progress, however, continued strong public support will be needed to keep this refuge moving forward.

Some landowners and local government officials have expressed concerns vis-a-vis the SRNWR. For example, landowners are understandably upset that this new refuge may increase their existing problems with respect to public trespass, vandalism, poaching, and littering. I and other refuge proponents understand and appreciate these concerns. We recognize that the refuge must be carefully planned and managed to eliminate these problems. We will work for strict refuge policies on public uses, coupled with supervision and enforcement. We also recognize that most landowner interest in negotiating for possible SRNWR acquisitions will involve easements. These easements provide habitat protection while precluding public access. Of course, we hope that some larger fee acquisitions will eventually occur, and that limited public uses—such as hiking, nature study, and birdwatching—will be allowed so long as they are controlled and compatible with refuge habitat objectives. People who want to camp or picnic should be directed to state or local parks.

A local government concern is the possible loss in property tax revenues. However, Congress appropriates funds each year to pay "in lieu" taxes to local governments. If there is nevertheless fear that these federal payments will not be adequate, we will work to overcome any shortfall.

Farmers have expressed concerns that the refuge may increase: EPA enforcement of future pesticide label restrictions designed to protect endangered species, pesticide drift complaints, and wildlife-crop conflicts. These concerns are difficult to understand because refuge acquisitions per se should not affect these activities. EPA's pesticide label restrictions will presumably seek to protect endangered species on a site-specific basis, whether these sites occur on private or public land. The controlling factors are the presence of endangered species and a known threat from pesticides. The EPA program has absolutely no connection to the refuge, other than the coincidence that they are both intended to benefit endangered species. If anything, farmers should welcome the opportunity to consider selling their land, either in fee or easement. If they find the EPA pesticide label restrictions onerous due to endangered species on their property, at least they have the option of receiving the fair market value for their property. Without the refuge and Congressional funding, they would not have this option.

The pesticide drift concern revolves around farmers being "good neighbors." If a pesticide applicator causes unauthorized pesticide drift onto another's property, it may kill trees and otherwise harm crops or animals. The neighboring landowner may have legal remedies to stop

future drift and be compensated for losses. These remedies are not changed by virtue of refuge acquisitions. Of course, a refuge manager should have the ability to seek these existing remedies, if appropriate, as a neighboring landowner. There are already four major federal refuges, plus federal easement areas, located in the Sacramento Valley, but we are not aware of any serious pesticide drift controversies.

With respect to wildlife-crop conflicts, it must be remembered that the refuge acquisitions are sought to protect existing riparian habitats. We are not aware of any data showing that these particular habitats are creating significant wildlife-crop conflicts. If the concern is that these habitats might someday create these conflicts, then what is the solution? Destroy all remaining riparian habitats? A responsible approach is that if these problems are documented, whether from private or public riparian habitats, the interested parties should work together to develop appropriate management solutions.

Another landowner recommendation has been that refuge acquisitions should be coupled with a commitment to resurrect the Chico Landing to Red Bluff Project. This Project involves rip-rap on outside bends along this stretch of the river. It was stopped by a FWS "jeopardy opinion" under the Endangered Species Act because of harm to the threatened valley elderberry longhorn beetle. There are several problems with this recommendation. The rip-rap project, given uncertain mitigation implementation, could destroy more riparian habitats than the refuge protects. It would violate the federal Endangered Species Act to pursue this project, in light of the "jeopardy opinion." The project has a questionable cost-benefit ratio, since there is no clear correlation between the project costs and corresponding reductions in downstream dredging costs. Finally, the ecological integrity and fisheries production of the river depends upon the natural cycle of continued erosion and habitat succession. The project is designed to thwart this cycle and it thereby could devastate the natural values that the refuge seeks to protect.

Besides SRNWR, other positive acquisitions have occurred and many more are anticipated. The Wildlife Conservation Board (WCB), Bureau of Land Management, Nature Conservancy, and Trust for Public Land have acquired some Sacramento River riparian habitats. The successful Proposition 70 initiative bond measure includes \$4,000,000 earmarked for WCB Sacramento River riparian acquisitions. The Sacramento River Preservation Trust was instrumental in achieving this Proposition 70 funding. It is important to underscore that these are willing seller acquisitions. Other state funding sources for possible future acquisitions include the Environmental License Plate Fund, Energy

and Resources Fund, Wildlife Restoration Fund, and voluntary endangered species tax check-off account.

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## Consensus

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My Sacramento River work has generally convinced me that there is a link between the breadth of coalition support and concomitant cooperation among interested parties and the relative speed and progress in achieving conservation objectives. In other words, conflict and stalemate achieve much. A comparison of my Remedies and Opportunities discussions should help illustrate this linkage. This is not to say that conflict itself is bad. It is often necessary before concerns are taken seriously and a foundation for compromise and cooperation is established.

The single most promising observation vis-a-vis Sacramento River riparian habitat conservation is that the ingredients for compromise, cooperation, and perhaps even consensus are now present, and the parties are resolving conflicts and moving closer together. The progress on SRNWR is one example. The so-called "S.B. 1086" studies and negotiations, pursuant to Senator Nielsen's legislation for a Sacramento River action team, advisory council, and report, are another. These and other opportunities are helping to educate people, identify concerns and conflicts, and provide the means for resolving them.

Please let me offer a scenario for consensus, including accompanying prerequisites. Conservationists should accept the fact that some level of further rip-rap may be needed for bona fide flood protection and to safeguard essential facilities, such as roads, bridges, etc. Conservationists should also accept that local governments have legitimate property tax concerns, and landowners have reason to fear rowdy refuge visitors. Conservationists should agree to support necessary flood control projects, work with local governments for adequate "in lieu" tax payments, and work with landowners for appropriate refuge management and re-restrictions on public uses.

For their part, the Corps and Reclamation Board should fairly try and evaluate less-damaging alternative

methods, use such methods wherever possible, and work to provide reliable and effective mitigation for both past and future habitat losses. In addition, they should work diligently with FWS and DFG to solve the dilemma of mitigating "heavily shaded aquatic" habitat losses along the river.

The landowners and local government officials should accept that riparian habitats must be protected and that opportunities for willing seller acquisitions are positive and desirable. They should help conservationists lobby for additional acquisition funding. They should accept that the river must be allowed to erode and meander in some reaches where it poses no significant public safety or flooding threat. They should accept that the taxpaying public does not wish to subsidize rip-rap to protect their private property from erosion, but that they have the option to shift this risk to the public through riparian acquisitions. The taxpaying public should accept that their funds will be spent for these acquisitions because it is the best hope of fulfilling their desires for improved endangered species, riparian habitat, and fisheries conservation.

I urge everyone to work to bring this scenario to fruition. If successful, it could serve as a persuasive precedent for riparian conservation elsewhere.

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