Brawley Constructed Wetlands Demonstration Project

ENVIRONMENTAL ASSESSMENT

and

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

FONSI No. 00-LC-028 **February 17, 2000**

Pursuant to:
Small Reclamation Projects Act of 1956 Loan
(P.L. 84-984 as amended)
Salton Sea Reclamation Act of 1998
(P.L. 105-372, as amended)

BUREAU OF RECLAMATION
Lower Colorado Region

Recommended: Henri J. Kaplan Date: 02/17/2000
Henri J. Kaplan - Preparer, Environmental Protection Specialist

Concur: for Del Kiel Date: 2/17/2000
William J. Liebhauser - Manager, Environmental Compliance and Realty Group

Approved: for Michael B. Walker Date: 2/17/2000
Deanna J. Miller - Director, Resource Management

PROPOSED ACTION TITLE: Brawley Constructed Wetlands Demonstration Project.

LOCATION OF PROPOSED ACTION: On the New River near Brawley and Imperial CA.
Brawley Site: Township 14 South, Range 14 East, Portion of Tract 199
Rice 3 Drain Site: Township 15 South, Range 13 East, Portions of Section 4 and 5

APPLICANTS : The Citizens Congressional Task Force on the New River (Task Force). Reclamation is a project proponent within the Task Force.

I. Need for Proposed Action

The New River has been recognized for many years as a river in need of help. The river is a tributary of the Salton Sea (Sea), located in the southern tip of California and occupying the northern part of the Salton Trough. The Sea is bordered on the northwest by the San Gorgonio pass, on the west by the San Jacinto and Santa Rosa Mountains and the Peninsular Range of Baja California and southern California, and on the east by the Little San Bernardino and Chocolate Mountains. On the south it is contiguous with the Imperial Valley through which the New River flows from Mexico and into the United States.

The focus of this project is to demonstrate the effectiveness of using constructed wetlands to improve water quality in the Imperial Valley, specifically on the New River. The Imperial Irrigation District (IID) provides agricultural and domestic water via the All American Canal to approximately 500,000 acres of farmland in the Imperial Valley. The Imperial Valley, in Mexico, maintains about 300,000 acres of irrigated and drained farmland where irrigation water is obtained by well fields in Mexico and gravity flow of Colorado River water delivered via the New Alamo Canal. A network of canals supply water throughout the Valleys. Drains at depths of 6 to 10 feet below surface called tile drains, carry drainage water containing dissolved salts to sumps or gravity tiles. These outlets are located at the lower end of the agricultural fields and discharge directly to surface drains (drainage ditches), these in turn drain to either the New River, Alamo River, Whitewater River, or directly into the Sea.

The Sea is a terminal lake with evaporation its only outlet and all of its tributaries, the Alamo River, Whitewater River and New River provide inflow. Within or adjacent to the Sea are located the Sonny Bono Salton Sea National Wildlife Refuge and a California state park. Since its creation in 1905, nutrients from the surrounding farmland have caused eutrophic conditions and salinity has increased. Recent water supply demands and promulgation of agricultural water quality objectives have also created pressure to alter the amount and the quality of water draining into the Sea through its tributaries. Changes made in response to this pressure could accelerate the decline of the Sea and seriously affect the surrounding area's water quality. The members of the Task Force, Federal agencies, and several local entities recognized the resource potential provided by the Sea and formed the Task Force to address these issues. Current salinity levels in the Sea are around 44,000 ppm. Ocean water salinity is around 35,000 ppm.

The Task Force is proposing to construct two demonstration wetlands on separate sites, both located in the Imperial Valley of Southern California. This construction requires federal permitting and regulatory approval from the Bureau of Reclamation (Reclamation), Environmental Protection Agency, and Army Corps of Engineers. Under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality regulations for implementing NEPA, Reclamation was designated as lead Federal Agency and the Task Force

designated as the Applicant for the proposed Brawley Wetlands Demonstration Project. The other federal agencies listed above are cooperators along with California Regional Water Quality Control Board, California Fish and Game, Office of US Congressman Hunter, Salton Sea National Wildlife Refuge, Imperial Irrigation District, and Imperial County. As lead federal agency, Reclamation has oversight responsibilities for managing the NEPA process, compliance documentation and agency coordination to be prepared for the proposed project. The Task Force is the applicant and will be funding the proposed project. Reclamation is participating in accordance with P.L. 105-372.

II. Description of Proposed Action and Alternatives

A. Proposed Action:

The purpose of these two pilot wetlands is not to create wildlife habitat but to demonstrate the ability of constructed wetland technology to improve the water quality of the New River. Water sources for the demonstration wetlands include agricultural drain water for the Rice 3 Drain wetland site and New River water for the smaller Brawley wetland site. Wetland-processed water leaving both sites will eventually be returned to the New River.

The proposed 7-acre site is adjacent to the New River near Brawley, CA. (See conceptual drawings and site maps, Attachment 1) The site is located among active agricultural fields with the closest building located 1/4 mile from the proposed site. The design for the constructed wetland encompasses the entire 7 acres and will consist of approximately five wet acres. Water will be pumped out of the New River and onto the site where it will flow through the wetland and then returned to the river. The site is owned by Imperial County and has been cultivated for at least 20 years. Vegetation on the site consists of a perimeter of mostly saltcedar. (See Biological Report, Attachment 2) (contact: Imperial County, Randy Reister 760-339- 4384).

The second site is located on 68 acres adjacent to the New River near Imperial, CA. (see Attachment 3) This site is also located adjacent to active agricultural fields and the closest building is 1/4 mile from the proposed site. The created demonstration wetland will use the entire 68 acres and will contain approximately 40 wet acres. This wetlands will use agricultural drain water from IID's Rice #3 drain that flows into the New River. After flowing through the wetland, the water will be returned to the New River. Scrub vegetation (salt cedar) on the site has been bladed on a regular basis but the site has never been cultivated. The site is located between a 70-foot high bluff, the Rice #3 agricultural drain and the New River. The property is owned by Imperial Irrigation District (contact: IID, Paul Peschel 760-339-9256).

The data on the effects of the wetland would be collected as discussed in the monitoring and operation plan (see attached Monitoring and Operation Plan, Attachment 4). Although the proposed area is not suitable habitat for Yuma clapper rail in it present condition, construction of wetlands could make it suitable. Therefore the monitoring plan addresses this issue. This information will indicate how effective constructed wetlands are at removing contaminants in the New River, what factors are critical to full time operation of a constructed wetland under those conditions with the minimum impact to wildlife. Elemental selenium is a major concern, as well as pesticide contamination from the surrounding agriculture; however, the purpose of the design and monitoring plan is to allow detection of problems early in the life of the project.

Water sources for the proposed demonstration wetlands include agricultural drain water for the larger (68-acre) Rice 3 Drain wetland site and New River water for the smaller (7-acre) Brawley wetland site. Wetland-processed water leaving both sites will eventually be returned to the New River.

Both IID and Imperial County are members of the steering committee for this study and have donated the land for use to construct the two wetlands. An Initial Study was done by Reclamation and prior California Environmental Quality Act documentation for a similar project was finalized on September 1, 1995 for the Rice 3 Drain site along with several other sites. CEQA documentation is included as Attachment 3.

B. No Action

Under the No Action alternative, Reclamation would not participate in the project. Based on the legislation, no other federal agency is tasked with taking action on this project. Therefore, there would be no action taken.

C. Alternatives Considered but Eliminated from Detailed Analysis.

A few other sites were considered for the project location, however, the two proposed sites are the only ones that meet the project criteria. The following table lists the project screening criteria used to determine the suitability of sites.

Criteria	Description
1. Immediate Access to Source Water	To keep operation and maintenance costs to a minimum, gravity flow into the wetland cells is essential. This is only possible immediately adjacent to the water source.
2. Exiting Support Roads	The amount of equipment used in construction and operation of the facilities requires road access. Construction of roads would be prohibitively expensive.

Criteria	Description
3. Zero Impact to Cultural/ Archeological	Given the nature of construction and operation any cultural landmarks would be destroyed and archeological findings would result in a prohibitive delay.
4. Minimal Impact to Endangered Species	The nature of the project makes it attractive to wildlife in the area, some of it endangered. This effect must be minimal and positive.
5. Zero legal entanglements	Any prolonged legal proceedings to gain access or acquisition would result in a prohibitive delay and cost.
6. Zero Acquisition Cost	Due to the small budget of the project. Any land considered for use in the project must be donated.
7. Acreage must be sufficient for objective.	The purpose is to test wetland technology on New River Water. To scale the project footprint down to a total area smaller than 70 acres would render the results from the investigation inconclusive.

Alternate Sites:

Alternate locations for the project are limited to surrounding available agricultural land being worked in the Imperial Valley. An alternative site for the Rice 3 Drain site is on the over-looking bluff to the south. Approximately 70 acres of production farmland is needed for the project. Although it would be located above the flood plain, acquisition of the land was abandoned when the IID parcel became available because of the prohibitive development and operation costs, and poor access to source water. Most of the development costs would be in acquiring the land and pipeline right-of -way from the private owners and building the additional piping and pumps to get the source water to the wetland. Increases in operation costs would be for lifting the water and maintenance of a much more complicated system. Use of this site would eliminate the project.

An alternative location for the smaller wetland above the flood plain is on a bluff southeast of the proposed Brawley site. This site suffers from the same ills as the alternative for the larger wetland - poor access to source water and prohibitive development/operating costs.

III. Environmental Impacts

The following critical elements of the human environment, with few exceptions, are either not present or would be unaffected by the proposed action or alternatives. The affected categories of T&E Species, Water Quality and Wetland and Riparian Resources are discussed in following the list of elements.

Critical Element	Affected Yes / No	Critical Element	Affected Yes / No
Air Quality	___ / XX	T & E Species	XX / ___
Cultural Resources	___ / XX	Wastes, Hazard/Solid	___ / XX
Environmental Justice	___ / XX	Water Quality	XX / ___
Farmlds, Prime/Unique	___ / XX	Wetlands/Ripar. Zns	XX / ___
Floodplains	___ / XX	Wild & Scenic Rivers	___ / XX
Indian Sacred Sites	___ / XX	Indian Trust Assets	___ / XX

A. Proposed Action

Environmental Compliance

Indian Trust Assets: The Department of Interior policy (Secretary of the Interior Order 3175) requires that actions under NEPA consider potential effects on Indian Trust Assets (ITAs). Reclamation policy is to protect ITAs from adverse impacts of its programs and activities when possible. Indian trust assets are property interests held in trust by the Federal government for the benefit of Indian tribes or individuals. Courts have traditionally interpreted them as being tied to property. Lands, mineral rights, and water rights are common examples of ITAS. There are no Federally recognized Indian tribes or tribal lands in the project area, and thus there will be no impacts on ITAS.

Environmental Justice: Executive Order 12898 and Reclamation Policy (PEP-No. ECM 95-3) requires that all NEPA documents consider the impacts of Federal actions on minority and low-income populations and communities, as well as the equity of the distribution of benefits and risks of those decisions. To comply with Environmental Justice Policy, NEPA documents should identify and evaluate any anticipated effects, direct or indirect, from the proposed project, action, or decision. No minority and/or low-income populations and communities are located in the proposed project area. Thus no impacts to minority and/or low-income populations and communities will occur as a result of the construction and operation of the proposed project.

Indian Sacred Sites: Executive Order 13007 requires Reclamation, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency

functions, to avoid adversely affecting the physical integrity of Indian sacred sites and to allow access by Indian religious practitioners to such sacred sites. The sites are agricultural and one has been in production for the past twenty years. Both sites were evaluated by Reclamation archeologists and neither site is owned by a tribe. Thus no impacts to Indian sacred sites and no interference with Indian religious practices will occur as a result of the construction and operation of the proposed project.

Threatened and Endangered Species: U.S. Fish and Wildlife Service (FWS) was contacted on Jul 21, 1998 by Reclamation to provide a list of potential Threatened and Endangered Species for the proposed project in accordance with Section 7(a) of the Endangered act of 1973. Their memorandum of Sep 8, 1998 provided a list of seven Endangered, Threatened, Proposed, and Candidate species (T&E) and 31 Sensitive species that may occur in the study area. (See Attachment 5, Section 7 Consultation Documentation)

Habitat and presence of the seven listed species were assessed in the Biological Report (Report, Jan 1999). (See Attachment 2) Based on the findings in the Report, Reclamation sent a memorandum dated 3/5/99, to FWS stating that Reclamation has determined that the project is "not likely to adversely effect" any listed species based on the lack of listed species or suitable habitat in the project area, and the project's potentially beneficial effects. FWS responded with comments that were incorporated into this EA/FONSI. Based on the criteria included in the attached operation and maintenance plan, and continued FWS coordination, FWS concurred in memorandum with Reclamation's project determination of not likely to adversely affect threatened or endangered species in the project area.

Informal consultation with the Fish and Wildlife Service (Service) was initiated and continues for the proposed project pursuant to Section 7 (a) and (c) of Endangered Species Act (ESA). Because of FWS representation on the Task Force, informal consultation was initiated when the Task Force first convened. Consultation is supported with a Negative Declaration completed by Imperial Irrigation District (1995) and a follow-up Biological Report (1998) (BR) prepared by Reclamation. Based on the review of available documentation and findings in the BR, Reclamation notified the Service that the proposed project was "Not Likely to Adversely Affect" listed species or their designated critical habitat. The "Not Likely to Adversely Affect" determination and notification commenced informal consultation under ESA. An Interagency Agreement for completion of the Coordination Act Report was drafted and sent to Fish and Wildlife Service.

Water Quality: The purpose of the project is to demonstrate how wetlands can improve water quality in the New River and inflows to the Salton Sea. Indications are that

benefits from this investigation could eventually reduce contaminates found in agricultural drainage water.

The Army Corps of Engineers (COE) has determined that this project did not come under the jurisdiction of Section 404 of the Clean Water Act. Because of this, the COE stated that a 404 Permit was not required.

Because of the exemption provided by Congress, and in consultation with the USEPA, the California Regional Water Quality Control Board determined that this project did not require a National Pollution Discharge Elimination System (NPDES) permit.

Wetlands/Riparian Zones: Success in demonstration of the wetlands to improve water quality could slow the decline of the Sea as a wildlife refuge. This also could result in creation of additional high quality wetland wildlife habitat.

B. No Action

Under the No Action alternative, there would be no direct impacts to T & E species, wetlands, riparian zones, and water quality. An opportunity would be lost to demonstrate the feasibility of using wetlands to improve water quality and potentially create additional high quality wetland habitat.

No action will result in the New River water remaining at its current poor quality. Further deterioration of the Salton Sea is also expected based on current use of the New River. If current water use practices are continued, eutrophic conditions in the Sea will prevail.

C. Cumulative Impacts

Cumulative impacts on water quality were considered for Threatened and Endangered Species, Water Quality and Wetlands/Riparian Zones and for a planning horizon of ten years. Although the concept of using wetlands could improve water quality within the Sea, the cumulative effects of this specific project are discountable or insignificant within the planning horizon for a two mile area surrounding the two wetland sites. Should the use of wetlands on the New River prove a success, then use of project findings to construct other wetlands on the New River and Alamo River would have the cumulative effect of slowing or stopping the decline of water quality. It could also improve the existing wetland and riparian areas and would most likely aid in the creation of new riparian habitat.

D. Environmental Mitigation Commitments

The following environmental mitigation commitments shall become a condition of approval.

Permits: The Task Force will obtain all necessary permits and will comply with all applicable Federal, State, and local regulations related to the environment. Copies of **all** permits will be provided to Reclamation for inclusion in the project file.

Cultural Resources: The State Historic Preservation Office (SHPO) was consulted and provided mitigation comments. Specifically, SHPO requested that IID will provide a trained person to be on site during the excavation phase of this project. Therefore, a qualified archaeologist and a Native American consultant shall monitor construction activities as they pass through either the Brawley site or the Imperial site. A qualified archaeologist shall monitor construction activities as they pass through or adjacent to the proposed sites. All of the identified sites have the potential for the discovery of buried cultural resources. The Task Force shall contract with a qualified archaeologist to implement the monitoring commitment and shall require the archaeologist to coordinate this work with Reclamation. The Task Force and archaeologist shall submit a letter report to Reclamation on the results of the field monitoring of the noted archaeological sites.

Should cultural resources be discovered during construction, all ground disturbing activities in the area of the archeological resource will stop and Reclamation's Regional Archeologist will be contacted at 702-293-8705. Reclamation's compliance coordinator will also be contacted at 702-293-8519. Construction will not resume until all mitigative measures developed in consultation with the State Historic Preservation officer have been completed.

Riparian Habitat: Both wetland outfall will tie into existing drainage at both sites.

Threatened and Endangered Species: Habitat and presence of the seven listed species were assessed in the Biological Report (Report, Jan 1999). (See Attachment 2) Based on the findings in the Report, Reclamation sent a memorandum dated 3/5/99, to FWS stating that Reclamation has determined that the project is "not likely to adversely effect" any listed species based on the lack of listed species or suitable habitat in the project area, and the project's potentially beneficial effects. After informal consultation, FWS concurred with Reclamation's determination in their memorandum dated January 26, 2000. (See Attachment 5) No mitigation for listed species is required at either site based on the revised project.

E. Finding:

Finding of No Significant Impact - In accordance with NEPA and the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA, Reclamation has determined that the agency's proposed action, construction and operation of the proposed Brawley Constructed Wetlands Demonstration Project, will not significantly affect the quality of the human environment. Based on the information contained in this Environmental Assessment, the Biological Report and other attached documentation, the Brawley Wetlands Demonstration Project will have no significant impact to the environment. An environmental impact statement will not be prepared. Any impacts to the environment resulting from actions taken under this project will most likely result in improved habitat and water quality for the affected area.

IV. Consultation and Coordination

A. Persons and Agencies Consulted

Members of The Citizens Congressional Task Force on the New River

NAME	AGENCY / ADDRESS	PHONE No.	FAX No.
Clark Bloom	Sonny Bono Salton Sea National Wildlife Refuge US Fish & Wildlife Service 906 W. Sinclair Rd., Calipatria, CA	760-348-5278	348-7245
Robertta Burns	Imperial County 940 W. Main, Suite 208, El Centro, CA 92243	760-339-4290	352-8786
Larry Caffey	US Bureau of Land Management 1661 S 4th Street, El Centro, CA 92243	760-337-4425	
Nancy Andrew	California Fish & Game PO Box 1347, Brawley, CA 92227	760-351-1676	
Jose Angel	California Regional Water Quality Control Board 73720 Fred Waring Drive 3100, Palm Desert CA 92260	760-346-7495	341-6820
Phil Gruenberg	California Regional Water Quality Control Board 73720 Fred Waring Drive 3100, Palm Desert CA 92260	760-346-7495	341-6820
Tom DuBose	Lyon Engineering, 1122 State Street, El Centro, CA 92243	760-353-8110	352-6408
Rob Zimmer	Imperial County, 760 W. Main Street, El Centro, CA 92243	760-353-7000	353-6956
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Stephen L. Birdsall	Imperial County Agricultural Commission 150 South 9th St., El Centro, CA 92243	760-339-4314	353-9420
Randy Rister	Imperial County, Property Services Dept. 1002 State Street, El Centro, CA 92243	760-339-4384	339-4372

NAME	AGENCY / ADDRESS	PHONE No.	FAX No.
Rudy Yniguez	Imperial Valley Press, PO Box 2770, El Centro, CA 92244	760-337-3453	353-3003
Mike Richmond	District Director, US Senator Diane Feinstein 750 "B" Street, Suite 1030, San Diego, CA 92101		
Cato Cedillo	Office of US Congressman Hunter, 366 So. Pierce St. El Cajon, CA 92020	800-365-4545	619-579-2251
Roy Schroeder	US Geological Service 5735 Kearny Villa Rd., San Diego, CA 92023	619-637-6824	637-6824
Jim Battin	Assemblyman, Eighteenth District 1101 Airport Drive, Suite J Imperial CA 92251	760-355-1295	355-1295
Carol A. Roberts	US Fish & Wildlife Service Carlsbad Field Office 2730 Loker Avenue West Carlsbad, CA 92008	760-431-9440	431-9624
Ken Strum	US Fish & Wildlife Service Salton Sea National Wildlife Refuge 906 West Sinclair RD Calipatria, CA 92233	760 348 5278	348-7248
Curt Tauscher	California Fish & Game, 330 Golden Shore, Suite 50, Long Beach, CA 90802	562-590-5113	590-5871
Teresa Newkirk	California Fish & Game, P.O. Box 1260 North Palm Springs, CA 92258	949-722-1770	
Eugenia McNaughton	US Environmental Protection Agency, WTR-4 75 Hawthorne Street, San Francisco, CA 94105	415-744-1162	744-1362
Becky Tuden	US Environmental Protection Agency, WTR-4 75 Hawthorne Street, San Francisco, CA 94105	415-744-1987	744-1362
Leon Lesicka	Desert Wildlife Unlimited, 4780 Highway 111, Brawley, CA 92227	760-344-7073	344-4076

NAME	AGENCY / ADDRESS	PHONE No.	FAX No.
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Chris Amrhein	University of California - Riverside, Dept. of Soils and Environmental Science Riverside, CA 92521-0424	909 787 5196	787-3993
Carl Bell	University of California - Cooperative Ext. 1050 E. Holton Road, Holtville, CA 92250,	760-352-9474	352-0846
Dr. Les Young	California Polytechnical University 3801 W. Temple Avenue, Pamona, CA 91768	909-869-2180	869-4454
Steve Muth	US Bureau of Reclamation PO Box 61470, Boulder City, NV 89006-1470	702-293-8119	293-8146
Cheryl Rodriguez	US Bureau of Reclamation PO Box 61470, Boulder City, NV 89006-1470	702-293-8129	293-8146
John Pattie	US Bureau of Reclamation PO Box 25007, D 8120, Denver, CO 80225-0007	303 445 3273	445-6489
Jim Setmire	US Bureau of Reclamation PO Box 849, Temecula, CA 92590-2628	909-695-5310	695-5319
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Steve Knell	Imperial Irrigation District, 333 East Barioni Imperial, CA 92251	760-339-9256	339-9262
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Mark Johnson	Imperial County Health Service 939 Main St. El Centro, CA 92243	760 339 4203	352-1309

NAME	AGENCY / ADDRESS	PHONE No.	FAX No.
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Antal Szijj	US Army Corps of Engineers, 32330 Santa Anna Canyon Road Highland, Ca 92346	909 794 7704	339-7911
Jurg Heuberger	Imperial County Planning, 939 Main Street, Fleet Building El Centro, CA 92243	760-339-4239	353-8338
Robert Mclean	National Wildlife Health Center 606 Schroeder Greenfield, WI 53711- 6223	608 270 2401	270-2415
Mary Kay Borchard	Imperial Valley College 427 Terrace Circle, Brawley, CA 92227	760-355-6279	355-2663
Carole Starr	US Congressman Duncan Hunter 1101 Airport Rd., Suite G, Imperial, CA 92251	760-353-0653	
Susan Manger	Imperial County 940 W. Main Street, El Centro, CA 92243	760-339-4740	352-7876
Philip Pryde	San Diego State University College of Arts and Letters San Diego, CA 92182-0381	619-594-5525	
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Daniel P. Connelly	Ducks Unlimited, Inc 3074 Gold Canal Drive Rancho Cordova, CA 95670-6116	916-852-2000	852-2200
Jason Caffey	California Waterfowl Association 905 Maple Avenue Holtville, CA 92250	760-356-4254	
John Scott	Metropolitan Water District of So. California PO Box 54153 Los Angeles, CA 90012		
Cindy Cheatwood	Hunter Employment Services PO Box 75 Brawley, CA 92227		

B. Scoping and Public Involvement

Meetings are held with the Task Force on a monthly basis. These meetings are conducted in a public forum with invitations for questions. Distribution of the Environmental Assessment was to public libraries in Brawley and El Centro for public comment after review by the Task Force and informal consultation with FWS. Notification of availability was accomplished via local newspapers of those municipalities with an appeal to the publication to write accompanying articles to explain details of the project. See Attachment 7 for documentation.

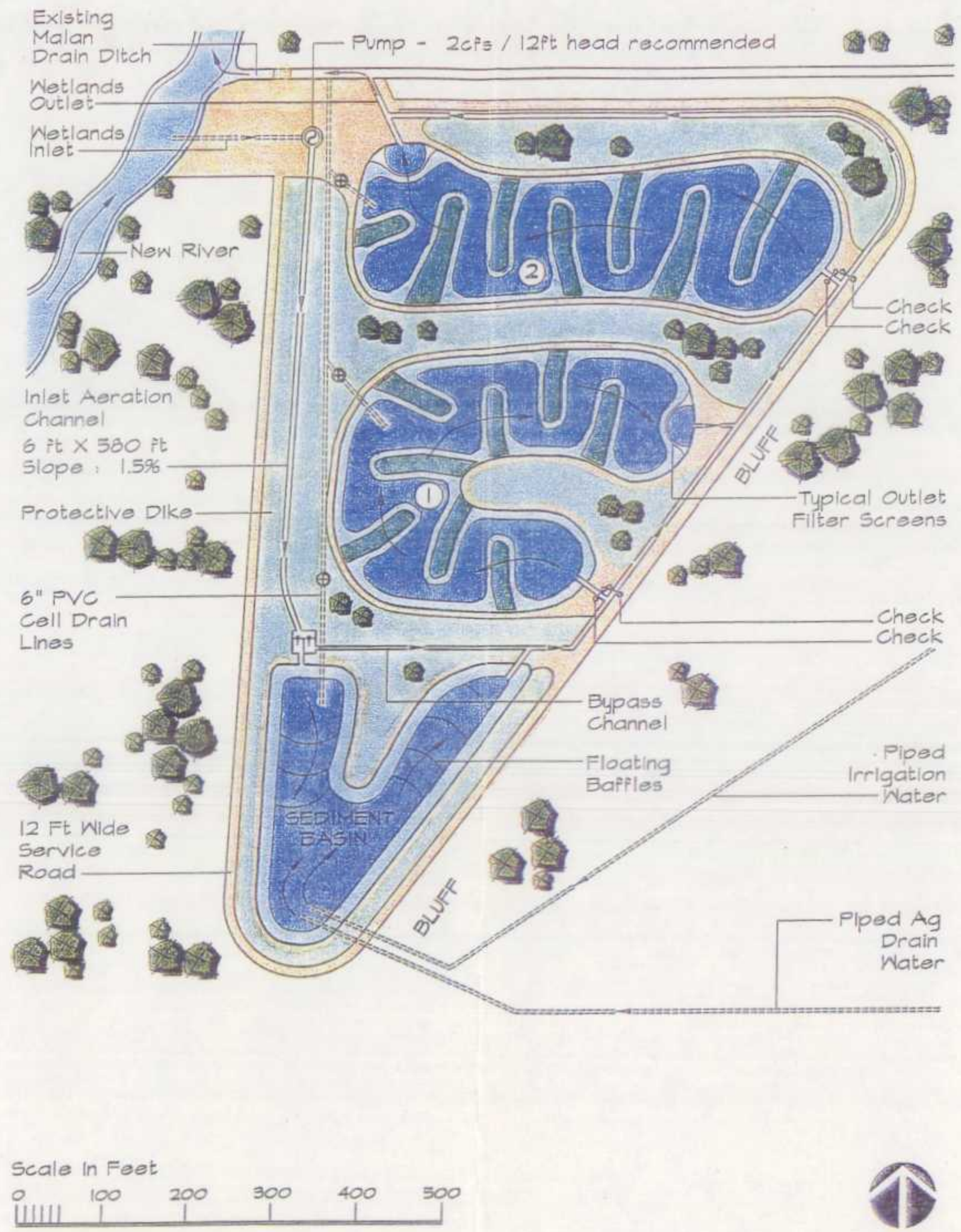
C. List of Preparers

Bureau of Reclamation

Dave Curtis, Environmental Protection Specialist
Pat Green, Environmental Protection Specialist
Dawna Ferris, Archeologist
Glen Gould, Fisheries Biologist
Barbara Raulston, Wildlife Biologist
Hank Kaplan, Biologist
Steve Muth, Biologist
John Palte, Design Architect

Attachment 1

Conceptual Drawings and Site Maps



MASTER PLAN - BRAWLEY SITE

Revised Jan. 18, 1999

CELL DATA BRAWLEY SITE

Based on a flow rate of 1 CFS

SEDIMENT BASIN:
Volume: 382,500 CF
Retention Time: 5-1/2 days
Maximum Depth: 4 ft

CELL 1 :
Volume: 163,000 CF
Retention Time: 2 days
Maximum Depth: 4 ft

CELL 2 :
Volume: 168,500 CF
Retention Time: 2 days
Maximum Depth: 4 ft

ALWAYS THINK SAFETY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
DESERT WILDLIFE UNLIMITED – BRAWLEY, CALIFORNIA
LOWER COLORADO REGION – BOULDER CITY, NEVADA
TECHNICAL SERVICES CENTER – DENVER, COLORADO

BRAWLEY WETLANDS RESEARCH FACILITY

BRAWLEY SITE – MASTER PLAN

DESIGNED J.F. PATTIE
DRAWN J.F. PATTIE
TECHNICAL APPROVAL
CHECKED
APPROVED
STRUCTURAL AND ARCHITECTURAL GROUP

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5 4 3 2 1

A B C D

CELL DATA
IMPERIAL SITE
WEST END

with cells 1 - 4 running parallel

SEDIMENT BASINS:

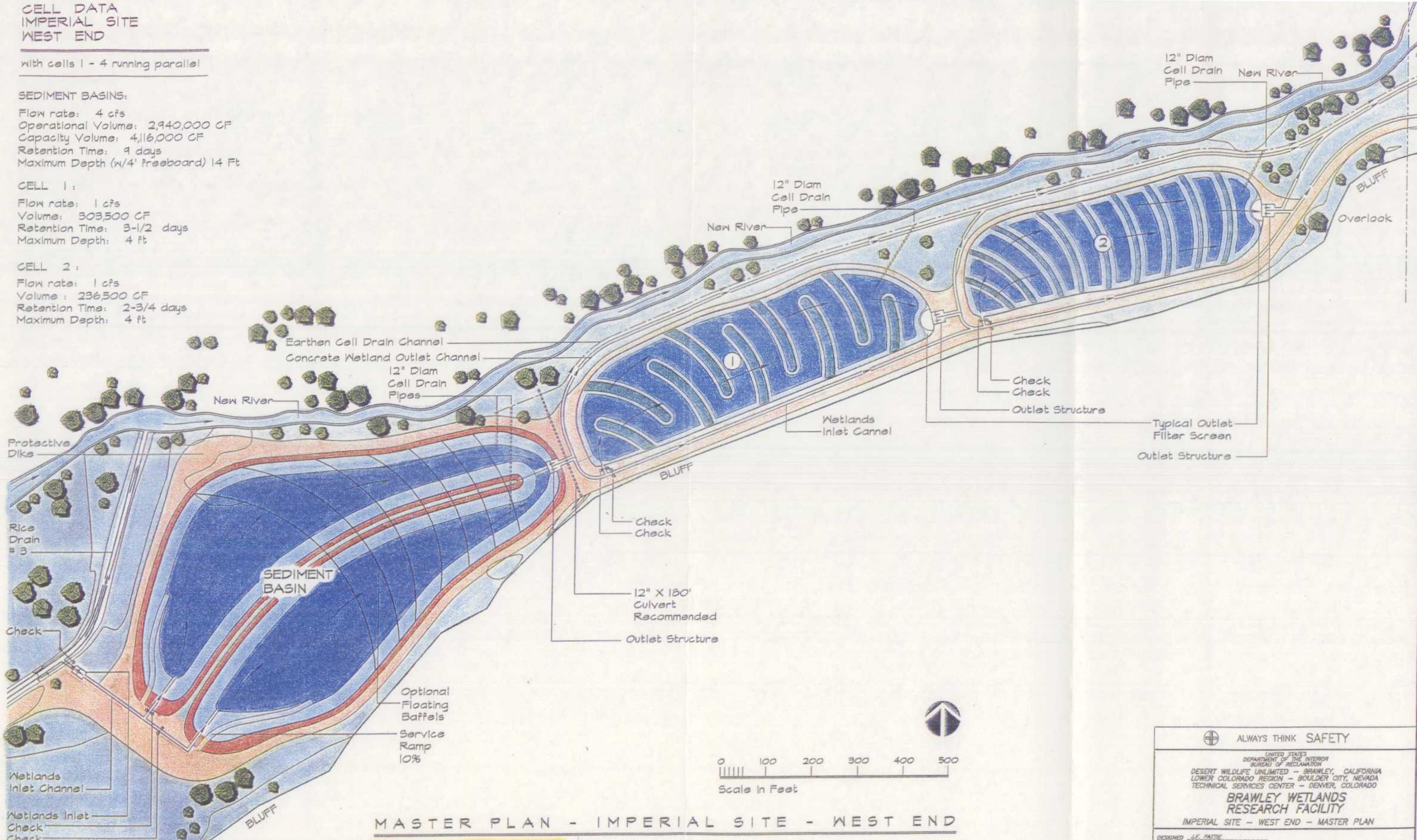
Flow rate: 4 cfs
Operational Volume: 2,940,000 CF
Capacity Volume: 4,116,000 CF
Retention Time: 9 days
Maximum Depth (w/4' freeboard) 14 Ft

CELL 1:

Flow rate: 1 cfs
Volume: 303,500 CF
Retention Time: 3-1/2 days
Maximum Depth: 4 ft

CELL 2:

Flow rate: 1 cfs
Volume: 236,500 CF
Retention Time: 2-3/4 days
Maximum Depth: 4 ft



MASTER PLAN - IMPERIAL SITE - WEST END

Revised - Jan. 18, 1999

ALWAYS THINK SAFETY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
DESERT WILDLIFE UNLIMITED - BRAWLEY, CALIFORNIA
LOWER COLORADO REGION - BOULDER CITY, NEVADA
TECHNICAL SERVICES CENTER - DENVER, COLORADO

BRAWLEY WETLANDS RESEARCH FACILITY

IMPERIAL SITE - WEST END - MASTER PLAN

DESIGNED J.F. PATTIE
DRAWN J.F. PATTIE
CHECKED
TECHNICAL APPROVAL
APPROVED
STRUCTURAL AND ARCHITECTURAL GROUP

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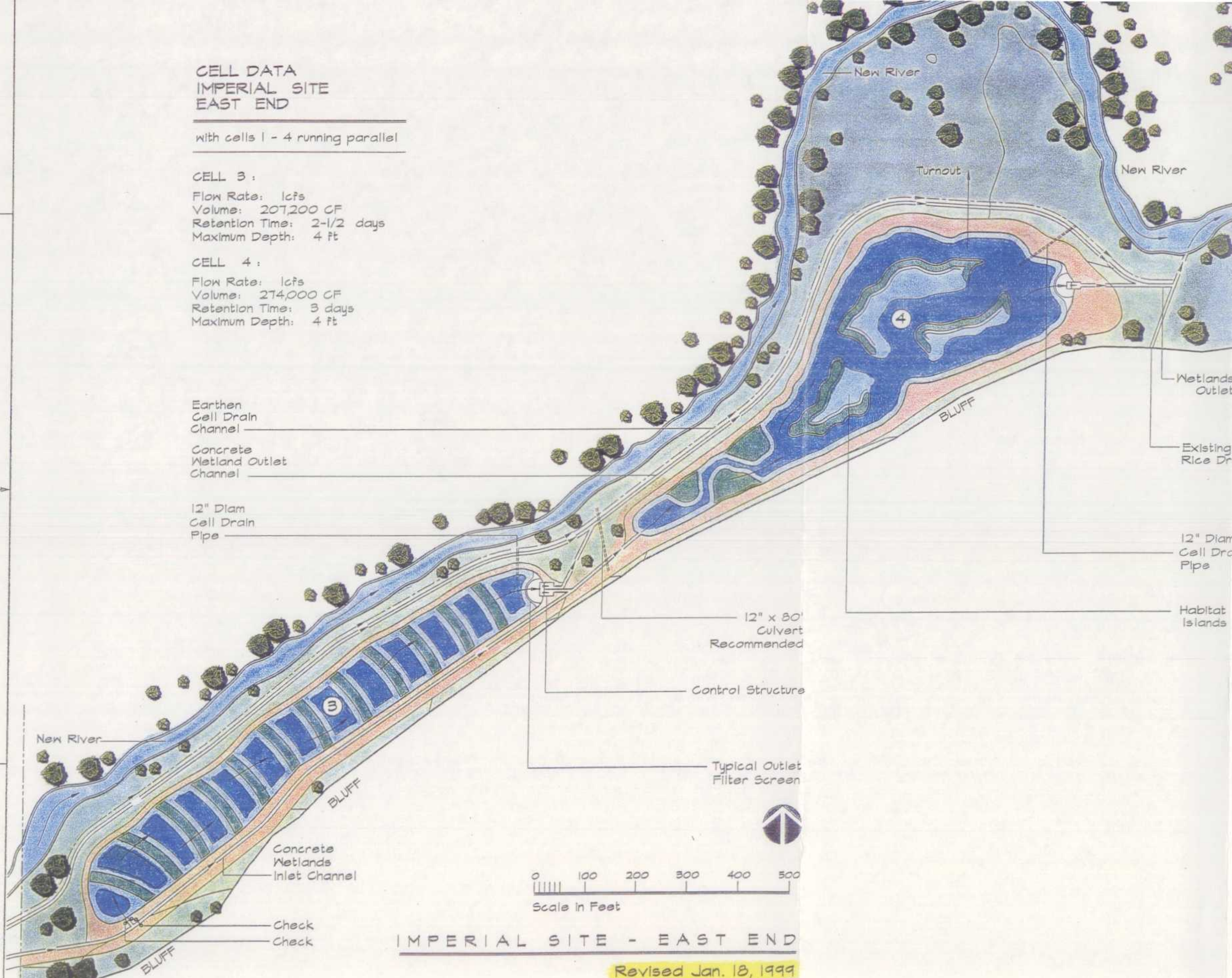

ALWAYS THINK SAFETY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
DESERT WILDLIFE UNLIMITED – BRAWLEY, CALIFORNIA
LOWER COLORADO REGION – BOULDER CITY, NEVADA
TECHNICAL SERVICES CENTER – DENVER, COLORADO

BRAWLEY WETLANDS
RESEARCH FACILITY

IMPERIAL SITE – EAST END – MASTER PLAN

DESIGNED J.E. PATTIE
DRAWN J.E. PATTIE TECHNICAL APPROVAL
CHECKED APPROVED
STRUCTURAL AND ARCHITECTURAL GROUP

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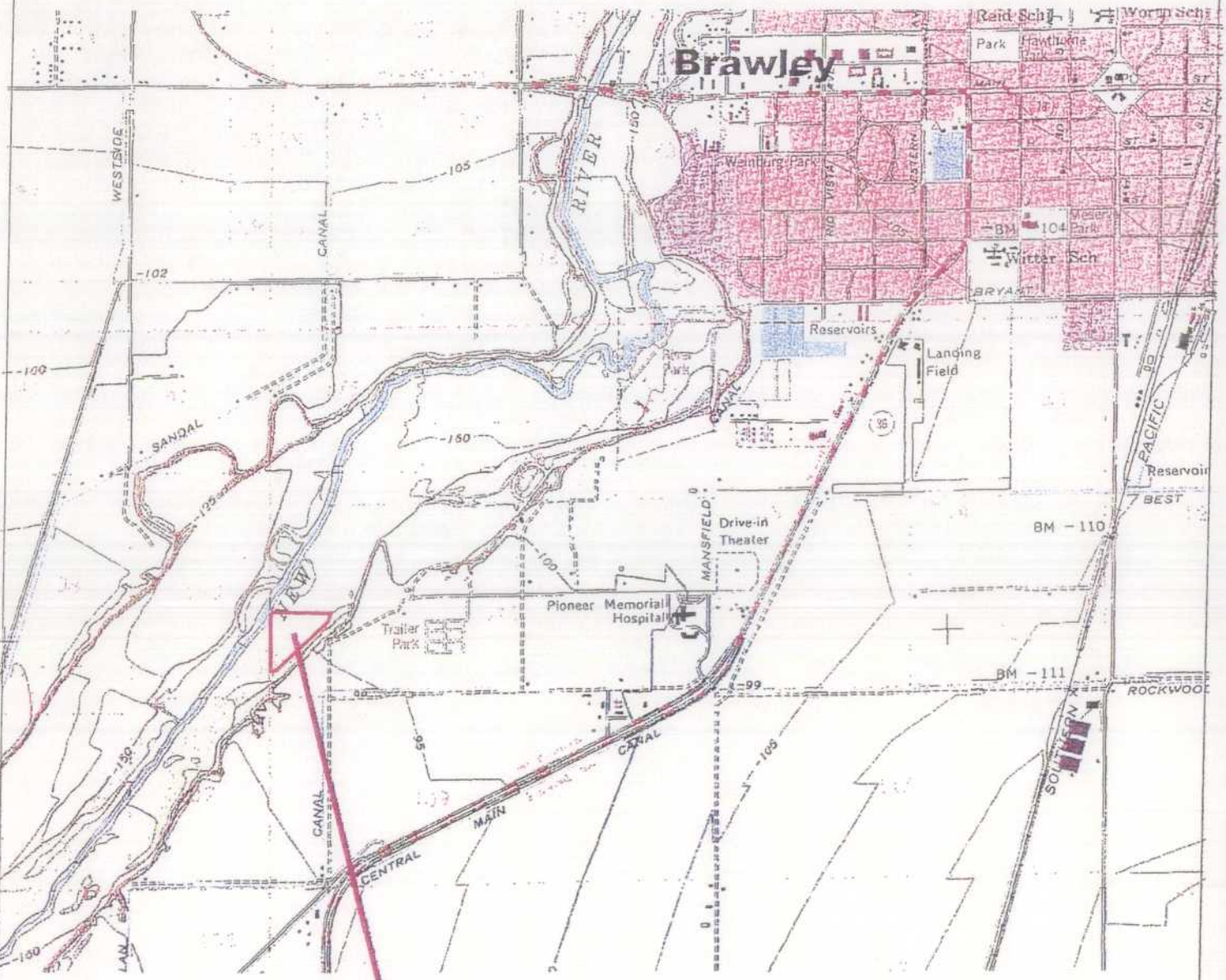
JPATTIE

Proposed 7-Acre Wetland
Near Brawley, California



Proposed Site

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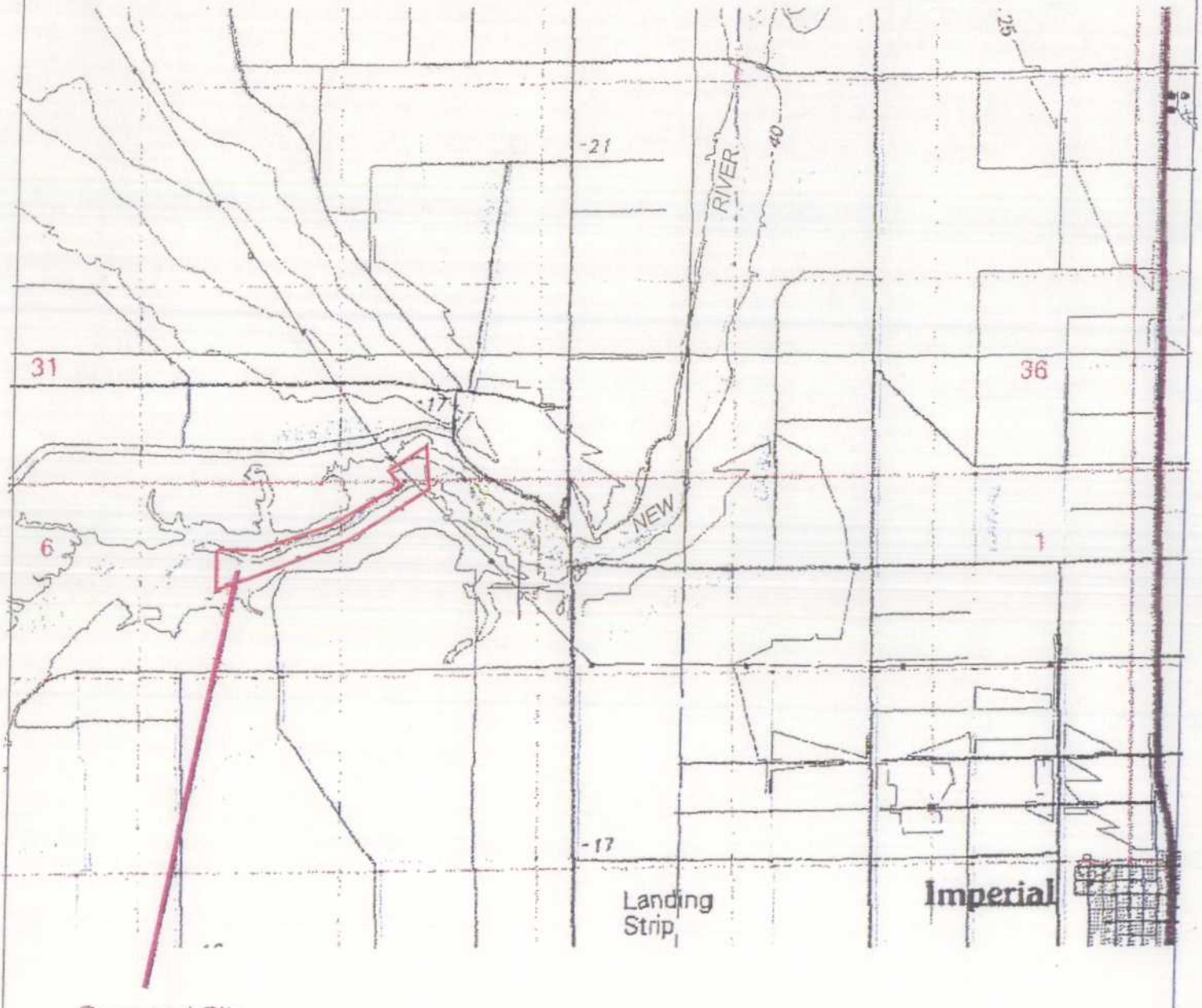
USBR, 9-27-97

Proposed 68-Acre Wetland Site
Near
Imperial, California



1 0 1 2 Miles

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USBR, 9-22-97

Attachment 2

Biological Report.

Biological Report
Brawley Wetlands Project

Proposed 7 Acre Site
29 May 1998, 9 am - 10:50 am, Barbara Raulston, Wildlife Biologist, BOR Lower Colorado River Regional Office

The vegetation community surrounding the Brawley Wetlands project area is dominated by a saltcedar (*Tamarix chinensis)* overstory with a smaller component of honey mesquite, (*Prosopis glandulosa*), athel tamarisk, (*Tamarix aphylla*), and palo verde, (*Cercidium floridum)*. The mid- and understory is composed of saltcedar, cattail, (*Typha* sp.), giant reed, (*Arundo donax),* quailbush and/or saltbush, (*Atriplex* sp)., and various *Baccarus* species.

The site is along the banks of the New River. Most avian species seen or heard are those typically found in riparian habitat, but some species associated with more upland habitat were also present. Riparian avian species present on 29 May include Green Heron, Abert's Towhee, Bewick's Wren, Snowy Egret, Crissal Thrasher (a pair with nesting material), and Common Yellowthroat. Others associated with riparian and/or upland habitat include Verdin, Gila Woodpecker, Mourning Dove, Brown-headed Cowbird, and Gambel's Quail. Spiny Lizard and bullfrogs, are also present.

Establishing a wetland that includes native riparian vegetation such as Goodings willow, *(Salix Goodingii)*, will only improve this habitat for the riparian species that are currently there. The surrounding saltcedar dominated habitat adjacent to open water, is very similar to habitat being utilized by Southwestern Willow Flycatchers on the lower Colorado River. Control of giant reed and saltcedar in the new wetland will be necessary until the native vegetation becomes established, and perhaps indefinitely. Although saltcedar is proving to be more valuable to wildlife than has it been considered in the past, giant reed is not often used by wildlife and would be detrimental if it was allowed to spread.

Proposed 68 Acre Wetland Site near Imperial, California
Barbara Raulston, Wildlife Biologist, BOR, LCR Regional Office visited the site on 8 October 1998.

The site for the proposed wetland is along the south bank of the New River, on the first (and only) terrace, 1- 2 feet higher than the river. This "terrace" is bordered by a bluff and agricultural fields are located much higher above the river. Vegetation along the river bank is very sparse; the areas upstream and downstream show signs of a recent burn. Vegetation includes, in approximate order of abundance, saltcedar, arrowweed, Atriplex sp., pickleweed, and phragmites. Most, if not all, of the mesquite up and downstream was burned and does not appear to have recovered. Habitat quality is poor, even the saltcedar is not dense enough to provide habitat. The presence of pickleweed indicates high soil salinity. High salinity would deter the establishment of many plants and accounts for the low diversity and density of what little vegetation is there. Downstream from the site there are a few large remnant cottonwoods, which may provide a seed source to the site, if conditions at the site ever favor germination (they don't at present). Any addition to the site of water and/or native vegetation, including cattails, would be an improvement.

Avifauna was scarce, but a few birds were seen in the agricultural fields above the site:
White-faced Ibis
American Kestrel
Cattle Egret
Kingfisher

Black Phoebe (foraging in agricultural drainage ditch adjacent to the site).

Marsh birds would likely increase in abundance with the addition of wetland vegetation. Great Blue Heron, Great and Snowy Egrets, Marsh Wren, Common Yellowthroat, and possible waterfowl during winter months may begin utilizing the area if habitat conditions improve. Rails may utilize the cattail marshes also. However, without surrounding vegetation such as mesquite, willow, and cottonwood, species such as Bell's Vireo, Song Sparrow, Yellow Warbler, Gila Woodpecker (those species seen/heard at the other proposed site on the New River) are not likely to benefit.

FWS Endangered and Threatened Species List

Pierson's Milkvetch
Habitat for this plant consists of sand dunes, with the only current known location being the Algodones Sand Dunes west of Yuma, AZ. The two proposed Brawley wetland sites are not now and probably never were sand dunes. Both are located in the flood plain of the New River. The upstream site has already been cleared of vegetation and surrounding areas are composed mostly of dense cattail, saltcedar, and mesquite and arrowweed. The downstream site has recently burned and consists of sparse saltcedar and arrowweed.

Brown Pelican
Large areas of open water, the preferred habitat for this species, are not present at either site. At its widest, the New River is approximately 100 feet across at both sites.

Peregrine Falcon
As with any raptor, it is possible to see one just about anywhere along it's migration route. However the nesting habitat preferred by this species would include very high cliffs. None are present at either site.

Southwestern Willow Flycatcher
At the upstream site, the proposed wetland will be surrounded by habitat consisting of dense saltcedar, cattail, and arrowweed, with scattered mesquite, with the New River in close proximity. Although the surrounding vegetation is possibly willow flycatcher habitat, the proposed wetland site has already been cleared of vegetation for previous farming activities. No further removal of vegetation is proposed. The addition of native vegetation to the area will only increase the quality of habitat for Willow Flycatchers and other migratory birds.
At the downstream site the saltcedar which is present is sparse and stunted and is not Willow Flycatcher habitat.

Aleutian Canada Goose
The upstream site is a 7 acre plowed field, surrounded by dense vegetation. Geese may possibly use the New River adjacent as a temporary resting area during migration and winter, but the field itself is completely dry, no

attractive food crops are present, and is therefore not "waterfowl habitat".

The downstream site is similar in waterfowl habitat quality. Although geese and other waterfowl may possibly be found on the river itself during migration and winter, the adjacent lands here are dry and covered with sparse saltcedar and arrowweed.

Yuma Clapper Rail
Limited habitat exists surrounding the upstream 7 acre site in the dense saltcedar along the New River, but there are a few large expanses of cattail habitat present in the area. The field itself is not clapper rail habitat, and the creation of a wetland here would only increase quality of habitat for this species.

At the downstream site, again, there is not enough cattail to be valuable as clapper rail habitat and the surrounding land is dry, covered with stunted saltcedar and arrowweed

Desert pupfish (*Cyprinodon macularius*)
Glen Gould, Fisheries Biologist, BOR, LCR Regional Office

Description and Life Requisites: The desert pupfish is a small killifish with a smoothly rounded body shape. Adults generally range from 2-3 inches in length. Males are smaller than females and during spawning the males are blue on the head and sides and have yellow edged fins. Most adults have narrow, dark, vertical bars on their sides. The species was described in 1853 from specimens collected in San Pedro River, Arizona. There are two recognized subspecies and possibly a third form (yet to be described). The nominal subspecies, *Cyprinodon macularius macularius*, occurs in both the Salton Sea area of southern California and the Colorado River delta area in Mexico and is the species of concern, herein. The other subspecies is C.m. *eremus* and is endemic to Quitobaquito Spring, Arizona.

The desert pupfish was listed as an endangered species on March 31, 1986. Critical habitat for the species was designated at the time of listing and included the Quitobaquito Spring which is in Organ Pipe Cactus National Monument, and San Felipe Creek along with its two tributaries Carrizo Wash and Fish Creek Wash in southern California. All of the former and parts of the latter were in Federal ownership at the time of listing. Reclamation purchased the remaining private holdings along San Felipe Creek and its tributary washes and turned them over to CFG in 1991. All of the designated critical habitat is now under State or Federal ownership.

Desert pupfish are adapted to harsh desert environments and are extremely hardy. They routinely occupy water of too poor quality for other fishes, most notably too warm and too salty. They can tolerate temperatures in excess of 110° F; oxygen levels as low as 0.1 ppm; and salinity nearly twice that of sea water (over 70 parts per thousand [ppt]). In addition to their absolute tolerance of these parameters, they are able to adjust and tolerate rapid, extreme changes to these same parameters (Marsh and Sada 1993).

The fish have a short life span, usually only 2 years, but they mature rapidly and can reproduce as many as three times during the year.

Distribution and Abundance: Desert pupfish inhabit desert springs, small streams, creeks, marshes and margins of larger bodies of water. The fish usually inhabit very shallow water, often too shallow for other fishes. Present distribution of the subspecies C. m. macularius includes natural populations in at least 12 locations in the United States and Mexico, as well as over 20 transplanted populations. Desert pupfish occur in the Salton Sea area, and are found in the agricultural drains in the Imperial Valley.

When the desert pupfish was listed as an endangered species (March 31, 1986), critical habitat was designated for the species along San Felipe Creek/San Sebastian Marsh, an intermittent stream and marsh complex on the west side of the Salton Sea. Reclamation purchased all of the private land holdings within the critical habitat area for $300,000 and turned this land over to CFG under a quitclaim deed in 1990.

Effects Analysis: Construction of both wetlands would start with a dry land site or a site which is minimally wetted with little, if any, open water. The wetlands would be filled with New River Water after construction. The material removed during construction would be deposited in an upland site. The operational wetland after construction may provide habitat for desert pupfish, although the only likely colonization of the species would be through deliberate introduction.

We conclude, therefore, that the construction and operation of the proposed wetlands would not affect desert pupfish.

Literature Cited: Marsh, P.C. and D.W. Sada. 1993. Desert Pupfish Recovery Plan. Fish and Wildlife Service, Albuquerque, New Mexico. 67 pp.

Attachment 3

IID Negative Declaration

Imperial Irrigation District

Final Negative Declaration

Agricultural Drain Ponding Project
Imperial County, California
SCH No. 95071100

Imperial Irrigation District
333 East Barioni Blvd.
Imperial, CA 92251

September 1, 1995

Final Negative Declaration

The Proposed Negative Declaration for the Agricultural Drain Ponding Project was prepared for public review in accordance with the California Environmental Quality Act and was circulated through the State Clearinghouse to the appropriate agencies. Copies of the Proposed Negative Declaration were made available at local public libraries and were also mailed directly to adjacent land owners.

The public comment period closed on August 24, 1995. Ten letters were received and are contained in Attachment E of this document. All comments are responded to in Attachment E. In some cases the body of the Negative Declaration has been modified to reflect comments received (identified in italics). This Final Negative Declaration represents the completion of the proposed document and has been prepared in accordance with the California Environmental Quality Act.

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Attachment B
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Attachment C
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Attachment D
IID Drain Water Quality Improvement Program - Monitoring & Reporting Program

Attachment E
Comment Letters and Responses

1.0 Project Description

The Imperial Irrigation District (IID) proposes to construct, operate, and maintain six (6) evaporation ponds at the lower end of five (5) agricultural drains prior to their discharging into the New or Alamo Rivers. The ponded water surfaces will range from 15 to 80 acres in size and store anywhere from 30 - 500 acre-feet per site. Depending on site topography, some sites may have multiple ponds, piggy-backed in succession, to increase water surface area and minimize construction costs.

Embankments for the ponds will be constructed from native upland material(s) found at the project sites. It should be understood that these ponds will be constructed as "flow-through" pond systems.

2.0 Project Location

Generally, all sites will be in the historic 1905 floodplain of the New and Alamo Rivers (Attachment B). Ponds would be constructed on lands that historically have been idle or never developed by agriculture within these river bottoms. Ponds would be constructed either on private property under an agreement with IID; on lands owned by IID; or on lands mutually shared by IID and adjacent landowners under an agreement.

Specific sites are (see Attachment B):

- RICE 3 DRAIN - Approximately 58 acres located within portions of Lots 4 & 5 Section 4, portions of Lots 6 & 7 Section 5, and Portions Tract 149, Section 5, all in the New River basin, T. 15 S., R. 13 E.

- ROSE OUTLET - Approximately 76 acres located within portions of N1/2 Tract 171 & E ½ Lot 31, Section 7, and Portions of E1/2 Lot 32, SELENIUM 40 acs. Tract 277, and the SW 40 acs. Tract 170, Section 6, all in the Alamo River basin, T. 14 S., R. 15 E.

- BRYANT DRAIN - Approximately 32 acres located within a portion of W1/2, SW 80 acs. of the Alamorio Tract, T. 13/14 S., R. 15 E.

- JONES DRAIN - Approximately 15 acres located within a portion of Tracts 170, 169-A, Section 3, East of Jones Drain the Alamo River, T. 13 S., R. 14 E.

- GREESON DRAIN @ NEW RIVER - Approximately 32 acres located within a portion of Tracts 166 & 200, Sections 19 & 20, all in the Greeson Drain Basin, T. 16 S., R. 13 E.

- GREESON DRAIN @ SCHANIEL RD. - Approximately forty acres located within a portion of Tract 205, Section 30, a portion of Tract 204, Section 29 & 30, a portion of Lot 27, Section 29, and Lot 4, Section 32, all in the Greeson Drain Basin, T. 16 S.,R. 13 E.

3.0 Project Objectives

The main objective of the proposed Agricultural Drain Ponding Project is to offset the rising level of the Salton Sea, the repository for agricultural drainage in the Imperial and Coachella valleys. *IID has been working in an emergency status since the first of this year in an effort to raise existing dikes surrounding the Salton Sea in order to prevent the further inundation of property. Although the Agricultural Drain Ponding Project is not part of this emergency effort,* the intent of the project is to create a greater surface area for evaporation of drainage water to occur before the water is returned to the New or Alamo Rivers and subsequently into the Salton Sea.

Similar projects that have been constructed by IID in the past are the Fig Drain in the mid -1970s and the Peach Drain Desiltation Demonstration Project in 1992. The Fig Drain Project *was* monitored by the Regional Water Quality Control Board *during the 1980s* and provides important fish and bird habitat. *Data from this monitoring is affixed as Attachment C.*

4.0 Discussion of Impacts

The following is a discussion of potential project impacts identified in the Initial Study. Because it has been determined, based upon the Initial Study that the proposed project will not have a significant impact on the environment and requirements have been placed on the project to reduce or avoid identified effects, no specific mitigation measures will be required as a condition of project approval. The discussion has been provided pursuant to Section 15063 (Initial Study) of the CEQA guidelines.

- EARTH. The proposed project will result in excavation and overcovering of soils. Earthwork that will disrupt and displace soils will be required to create drain ponds. It is anticipated that effective embankment heights will range between 2 to 10 feet. Minor soil erosion from wind and water may occur during and after construction. A National Pollutant Discharge Elimination System (NPDES) Stormwater Pollution Prevention Plan will be required because an area greater than five acres will be disturbed by construction. This impact has been determined not to be significant because the total area of impact is minor when compared to the total area within the floodplain.

  The creation of pond embankments and associated excavation to build them will cause a minor change in the local topography and existing surface relief features. This change may have a secondary beneficial impact by converting the low habitat value vegetation to a more valuable marsh environment.

  The Imperial Valley drainage system has a considerable silt load, therefore, ponds on occasion may have to be cleaned due to deposition of silt. This impact is considered insignificant and may be beneficial by reducing the amount of silt load downstream of ponds as well as in the Salton Sea. The IID is currently implementing a Drainwater Quality Improvement Program to address sediment reduction in the drains. This is in cooperation with the Regional Water Quality Control Board.

- WATER. The goal of the proposed project is to offset the rising level of the Salton Sea by evaporating water before it enters the Sea, thus creating a change in the amount of surface water in downstream drains (New and Alamo Rivers) and in the Salton Sea. This is considered a beneficial impact.

It is anticipated that a secondary benefit would be a measurable improvement in the drain water quality entering the New and Alamo Rivers from these ponded drains. This is supported by the *data collected in the 1980s by the* Regional Water Quality Control Board of the inflow and outflow of the Fig Evaporation Pond currently operating at the outlet of the Fig Drain. *Attachment D contains the Drain Water Quality Improvement Plan (DWQIP), Monitoring and Reporting Program adopted by the IID Board of Directors. All five drains included in this project will be added to the DWQIP. In addition, all ponds will incorporate a bypass system such that no water will flow through the ponds during the cleaning process. This design will eliminate the possibility of downstream environmental impacts that could result from the silt removal operation.*

- PLANT LIFE. Preliminary site surveys indicated that vegetation at all sites is predominantly saltcedar, *Tamarix ~~ramosissima~~ chinensis*, an exotic species which is detrimental to native plant species and decreases habitat value. Other vegetation present at the sites include scattered mesquite and phragmites. Implementation of the proposed project would result in a reduction in the acreage, by flooding, of saltcedar. Although a few mesquite trees would also be flooded and lost, the overall impact is considered beneficial because of the decrease in saltcedar.

  By ponding the proposed sites, a barrier to the normal replenishment of saltcedar may occur, however, this is not considered a significant impact due to the present abundance of the species and its being a non-native species.

- ANIMAL LIFE. Because the proposal will result in the flooding of land, some animals (such as rodents and reptiles) currently inhabiting the site may not be able to abandon the site. However, we believe that creation of these ponds will enhance fishery and bird habitat, by creating nesting, feeding, and loafing sites. *The five drains included in this project have been added to the DWQIP (Attachment D) and will be watched closely for impacts to wildlife.*

- NOISE. The proposed project will generate an increase in existing noise levels in surrounding areas during project construction. All sites are in rural areas. This is not considered a significant impact as construction noise constitutes a short-term effect that will terminate upon completion of project construction. No significant noise receptors are present in the project area. In addition, temporary increases in noise levels are expected to be within normal limits and all equipment will operate under the applicable State of California vehicle noise attenuation standards. Compliance with these standards, as well as the standards imposed by the County of Imperial, will ensure that construction noise impacts on surrounding areas are not significant.

- HUMAN HEALTH. Because the ponds will periodically have to be cleaned due to siltation, people have the potential to be exposed to sediments which may or may not contain some level of chemicals (pesticides, fertilizer, etc.). These sediments are of basically the same composition as the existing soils of agricultural crops within the Imperial Valley. There is no documented evidence of human health effects from sediments cleaned from drains and applied to drain banks. This impact is considered minimal and insignificant. Human contact with drain water through recreation is also a possible impact. However, this is considered an insignificant impact. Agricultural drains in the Imperial Valley have REC1 and REC2 beneficial use designations under the *Water Quality Control Plan for the Colorado River Basin* administered by the Regional Water Quality Control Board, *and are regularly fished. The proposed ponds are at the ends of existing drains where*

potential for contact already exists.

- RECREATION. Creation of these ponds may provide opportunities for fishing and bird watching. This is considered an insignificant but beneficial impact.

- CULTURAL RESOURCES. References exist which indicate fishing use of the New River by ancient Yuman or Cahuilla Indians. Some cultural resource artifacts may be present. A Staff member holding a cultural resource survey permit will survey the sites prior to construction. Appropriate agencies will be notified of cultural resource finds.

5.0 Findings

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970," as amended, a Draft Negative Declaration is hereby made on the Agricultural Drain Ponding Project.

Based on the attached Initial Study and Environmental Checklist, it has been determined that construction of the proposed project will not have a significant effect on the environment. Requirements have been placed on this project to reduce or avoid all identified effects to a level of insignificance. Therefore, no specific mitigation measures have been placed on the proposed project.

6.0 Public Review

- This environmental document will be filed with the Assistant Secretary to the Board of Directors and posted for public review at the Executive Offices of the Imperial Irrigation District located at 1284 Main Street, El Centro, California, as of July 25, 1995. This document has also been filed with the California Office of Planning & Research, State Clearinghouse, to be distributed to reviewing agencies.

- A notice that the Negative Declaration will be considered for approval at the September 5, 1995 regular meeting of the Board of Directors will be published in the Imperial Valley Press prior to that meeting.

- This Proposed Negative Declaration is available to the public at the Brawley, Calexico, Calipatria Meyer Memorial, El Centro, Holtville, and Imperial Public libraries.

- Members of the public may appear before the Board of Directors to present their views at the August 22, 1995 meeting and also at the September 5, 1995 meeting prior to the Board's determination to approve or disapprove the Negative Declaration and the project.

July 26, 1995

Date Proposed Negative Declaration filed with Assistant Secretary to the Board of Directors

9/1/95

Date Final Negative Declaration filed with Assistant Secretary to the Board of Directors

/s/

General Manager

Attachment A
Initial Study and Environmental Checklist

Initial Study and Checklist

(To be completed by Lead Agency)

SECTION I.

Title of Proposal: Agricultural Drain Ponding Project

Date Checklist Submitted: July 12, 1995

Agency Requiring Checklist: Imperial Irrigation District

Lead Agency: Imperial Irrigation District

Agency Address: 333 East Barioni Blvd.

City/State/Zip: Imperial, CA 92251

Agency Contact: Michel Remington, Environmental Compliance Coordinator Phone: (619)339-9149

SECTION II.

Project Description: As a measure to offset the rising level of the Salton Sea, the Imperial Irrigation District (IID) is proposing to "pond-up" some of their agricultural drains prior to their discharging into the New or Alamo Rivers. A similar type project was constructed by the IID in the mid 1970's at the outlet of the Fig Drain.

Generally, all sites will be in the historic 1905 floodplain of the New and Alamo Rivers. Ponds will be constructed on lands that historically have been idle or never developed for agriculture within these river bottoms. Ponds would be constructed either on private property under an agreement with IID; on lands owned by IID; or on lands mutually shared by IID and adjacent landowners under an agreement.

Embankments for the ponds would be constructed from native upland material(s) found in these flood plains. It should be understood that these ponds will be constructed as "flow-through" pond systems. That is, the intent is to create greater surface area for evaporation to occur before the water is discharged to the New or Alamo Rivers.

Embankment heights will vary depending on the topography of each site. It is anticipated to maintain the effective embankment heights within the range of 2 to 10 feet.

Based on preliminary site investigation work, the effected ponded water surfaces will range from 15 to 100 acres in size and store anywhere from 30-1000 acre-feet per site. Depending on site topography, some sites may have multiple ponds, piggy-backed in succession, to increase water surface area and minimize construction costs.

SECTION III. ENVIRONMENTAL IMPACTS:

(As required by CEQA, an explanation of all "yes" and "maybe" answers are provided in Section IV, including a discussion of ways to mitigate the significant effects identified.)

	Yes	Maybe	No
1. EARTH. *Will the proposal result in:*			
a) Unstable earth conditions or in changes in geologic substructures?			X
b) Disruptions, displacements, compaction or overcovering of the soil?	X		
c) Change in topography or ground surface relief features?	X		
d) The destruction, covering or modification of any unique geologic or physical features?			X
e) Any increase in wind or water erosion of soils, either on or off the site?			X
f) Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?		X	
g) Exposure of people or property to geologic hazards, such as earthquakes, landslides, mudslides, ground failure, or similar hazards?			X
2. AIR. *Will the proposal result in:*			
a) Substantial air emissions or deterioration of ambient air quality?			X
b) The creation of objectionable odors?			X
c) Alteration of air movement, moisture, or temperature, or any change in climate, either locally or regionally?			X
3. WATER. *Will the proposal result in:*			
a) Changes in currents, or the course or direction of water movements, in either marine or freshwaters?			X
b) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?			X
c) Alterations to the course or flow of flood waters?			X
d) Changes in the amount of surface water in any water body?	X		
e) Discharge into surface waters, or in any alteration of surface water quality, including, but not limited to, temperature, dissolved oxygen or turbidity?		X	
f) Alteration of the direction or rate of flow of ground waters?			X
g) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?			X
h) Substantial reduction in the amount of water otherwise available for public water supplies?			X
i) Exposure of people or property to water related hazards such as flooding or tidal waves?			X

	Yes	Maybe	No
4. PLANT LIFE. *Will the proposal result in:*			
a) Change in the diversity of species, or number or any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?	X		
b) Reduction of the numbers of any unique, rare, or endangered species of plants?			X
c) Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	X		
d) Reduction in acreage of any agricultural crop?			X
5. ANIMAL LIFE. *Will the proposal result in:*			
a) Change in the diversity of species, or numbers of any species of animals (birds; land animals, including reptiles; fish and shellfish, benthic organisms or insects)?		X	
b) Reduction of the numbers of any unique, rare, or endangered species or animals?			X
c) Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?			X
d) Deterioration to existing fish or wildlife habitat?			X
6. NOISE. *Will the proposal result in:*			
a) Increases in existing noise levels?	X		
b) Exposure of people to severe noise levels?			X
7. LIGHT and GLARE. *Will the proposal:*			
a) Produce new light or glare?			X
8. LAND USE *Will the proposal result in:*			
a) Substantial alteration of the present or planned land use of an area?			X
9. NATURAL RESOURCES *Will the proposal result in:*			
a) Increase in the rate of use of any natural resources?			X
10. RISK OF UPSET. *Will the proposal involve:*			
a) A risk of an explosion or the release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?			X
b) Possible interference with an emergency response plan or an emergency evacuation plan?			X
11. POPULATION. *Will the proposal:*			
a) Alter the location, distribution, density or growth rate of the human population of an area?			X
12. HOUSING. *Will the proposal:*			
a) Affect existing housing, or create a demand for additional housing?			X

	Yes	Maybe	No
13. TRANSPORTATION/CIRCULATION. *Will the proposal result in:*			
a) Generation of substantial additional vehicular movement?			X
b) Effects on existing parking facilities, or demand for new parking?			X
c) Substantial impact upon existing transportation systems?			X
d) Alterations to present patterns of circulation or movement of people and/or goods?			X
e) Alterations to waterborne, rail or air traffic?			X
f) Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?			X
14. PUBLIC SERVICES. *Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:*			
a) Fire protection?			X
b) Police protection?			X
c) Schools?			X
d) Parks or other recreational facilities?			X
e) Maintenance of public facilities, including roads?			X
f) Other governmental services?			X
15. ENERGY. *Will the proposal result in:*			
a) Use of substantial amounts of fuel or energy?			X
b) Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?			X
16. UTILITIES and SERVICE SYSTEMS. *Will the proposal result in a need for new systems, or substantial alterations to the following utilities:*			
a) Power or natural gas?			X
b) Communications systems?			X
c) Water?			X
d) Sewer or septic tanks?			X
e) Storm water drainage?			X
f) Solid waste and disposal?			X
17. HUMAN HEALTH. *Will the proposal result in:*			
a) Creation of any health hazard or potential health hazard (excluding mental health)?		X	
b) Exposure of people to potential health hazards?		X	
18. AESTHETICS. *Will the proposal result in:*			
a) The obstruction of any scenic vista or view open to the public?			X
b) The creation of an aesthetically offensive site open to public view?			X

Attachment C
Fig Drain Data

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

WATER QUALITY ANALYSES OF IMPERIAL VALLEY
DRAINAGE FED WETLANDS SYSTEMS
Sampling and Analyses by Regional Board Staff

LOCATION: Fig Drain (Fig Lake Influent)

Date	7-21-82	12-2-82	1-18-83	11-9-83	1-25-84	3-27-84	1-28-85	3-12-85	4-4-85	6-18-
Temperature °C	25	18	19	22	15	23	19	19	25	
Field pH		8.0	7.5	7.6	7.7	7.7		8.0	7.9	
Lab pH	7.8						7.9			7.
Dissolved Oxygen mg/l	6.2	10.5	8.5	8.9	9.2	8.9	11.0	8.4	8.7	9.
Turbidity NTU	43	19	1100	62	61	85	25	104	31	
Specific Cond. umhos/cm	2200	2400	2100	1900	1900	1500	1900	1600	1800	170
Total Diss. Solids mg/l	1300	1490	1300	1460	1310	1260	1232	1082	1244	12
Suspended Solids mg/l	71	26	2410	124	120	154	39	206	89	
Vol. Susp. Solids mg/l	4.0	5.2	128	16	<1.0	42	9	20	17	
Settleable Solids ml/l										
10 Minutes	0.1	0.0	1.2	<0.1	0.3	0.2	0.1	0.5	0.1	0.
30 Minutes	0.1	0.0	3.5	0.1	0.4	0.2	0.1	0.8	0.2	0.
1 Hour	0.1	0.0	8.2	0.1	0.6	0.3	0.2	0.9	0.2	0.
Phosphate PO_4-P mg/l	0.90	0.14	3.07	0.30	0.97	0.82	0.26	0.70	0.36	0.1
Nitrate NO_3-N mg/l	4.0	5.8	5.20	5.2	4.3	4.2	3.48	2.50	3.25	2.7
Nitrite NO_2-N mg/l	<.005	0.028	0.004	0.004	0.012	0.012	0.04	0.00	0.051	0.0
Ammonia NH_3/NH_4-N mg/l	0.2	0.16	0.14	0.10	3.48	0.60	0.13	1.40	0.29	0.1
Kjeldahl Nitrogen mg/l	0.6	0.72	2.07	0.79	3.73	2.09	0.38	10.85	0.34	12.0
COD mg/l	23	17	67	44	37*	16*	17	10	16	1
20°C BOD_5 mg/l					2.4*	4.2*				
Fecal Coliform MPN/100 ml	1300	20	490	330	230	170	40	1100	220	3

*Filtered

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

WATER QUALITY ANALYSES OF IMPERIAL VALLEY
DRAINAGE FED WETLANDS SYSTEMS
Sampling and Analyses by Regional Board Staff

LOCATION: Fig Lake Effluent

Date	7-21-82	12-2-82	1-18-83	11-9-83	1-25-84	3-27-84	1-28-85	3-12-85	4-4-85	6-18
Temperature °C	30	13	16	21	13	18	15	16	25	
Field pH		8.5	8.2	8.1	8.2	7.7	7.2	8.3	8.5	
Lab pH	8.0									7
Dissolved Oxygen mg/l	17.8	17.1	19.1	15.0	19.0	6.1	16.2	14.2	>20	9
Turbidity NTU	34	19	18	24	22	63	19	39	47	
Specific Cond. umhos/cm	2700	3000	3500	2300	2570	2300	2600	2400	2200	22
Total Diss. Solids mg/l	1560	1800	2140	1710	1730	1450	1754	1600	1448	15
Suspended Solids mg/l	9.3	39	34	51	39	126	47	42	118	
Vol. Susp. Solids mg/l	5.3	12	8.5	19	14	36	29	17	48	
Settleable Solids ml/l										
10 Minutes	0.1	0.1	0.0	0.0	0.0	0.1	<0.1	0.1	<0.1	<0
30 Minutes	0.1	0.1	0.0	0.0	0.0	0.2	<0.1	0.1	<0.1	<0
1 Hour	0.1	0.1	0.0	0.0	0.0	0.3	<0.1	0.2	0.1	<0
Phosphate PO_4-P mg/l	0.11	0.24	0.29	0.50	0.58	0.39	0.45	0.28	0.30	0.
Nitrate NO_3-N mg/l	0.8	3.34	4.04	1.6	1.6	1.2	2.08	2.75	0.88	0.
Nitrite NO_2-N mg/l	<.005	0.094	0.012	0.004	<0.002	0.036	0.11	0.15	0.10	0.
Ammonia NH_3/NH_4-N mg/l	0.3	0.18	1.58	0.40	0.68	0.54	0.52	0.61	0.18	0.
Kjeldahl Nitrogen mg/l	1.1	2.44	3.23	2.52	3.13	2.88	1.35	1.21	0.35	4.
COD mg/l	54	42	48	62	45*	19*	43	44	66	
20°C BOD_5 mg/l					2.0*	2.7*				
Fecal Coliform MPN/100 ml	150	<20	50	20	50	20	50	790	490	7

*Filtered

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

PESTICIDE ANALYSES OF IMPERIAL VALLEY AGRICULTURAL DRAINAGE FED WETLANDS SYSTEMS

Samples Collected by RWQCB 7 Staff Analyses by Dept. Health Services - L.A.

Date	Location	Pesticide	Results
3-27-84	Fig Lake Effluent	Group I[1]	None detected
3-27-84	Upper Ramer L. Eff.	Group I	None detected
3-12-85	Fig Lake Influent	Group I & V[2]	1.1 µg/l Malathion
3-12-85	Fig Lake Effluent	Group I & V	None detected[3]
3-12-85	Upper Ramer L. Inf.	Group I & V	0.35 µg/l DDE
3-12-85	Upper Ramer L. Eff.	Group I & V	None detected[3]
4-4-85	Fig Lake Influent	Group I & V	None detected[4]
4-4-85	Fig Lake Effluent	Group I & V	None detected[4]
4-4-85	Upper Ramer L. Inf.	Group I & V	None detected[4]
4-4-85	Upper Ramer L. Eff.	Group I & V	None detected[4]
6-18-85	Fig Lake Influent	Group I & V	None detected[5]
6-18-85	Fig Lake Effluent	Group I & V	None detected[5]
6-18-85	Upper Ramer L. Infl.	Group I & V	None detected[5]
6-18-85	Upper Ramer L. Effl.	Group I & V	None detected[5]

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1 Group I pesticides are aldrin, BHC isomers, DDE isomers, DDD isomers, DDT isomers, chlordane, dieldrin, endosulfan isomers, endrin, heptachlor, heptachlor epoxide, hexachlorobenzene, and methoxychlor.

2 Group V pesticides are azinphos methyl, carbophenothion, diazinon, malathion, ethyl parathion, methyl parathion, phorate, and ronnel.

3 <0.2 ppb for Group I pesticides; <0.3 ppb for Group V pesticides.

4 <0.1 ppb for Group I pesticides; <0.2 ppb for Group V pesticides.

5 <0.1 ppb for Group I pesticides; unspecified detection limit for Group V pesticides.

COLLECTION DATE : 09/10/85 ST.ED. NO. 723.10.45

LOCATION: FIG LAKE

FISH COMMON NAME: CARP

MEAN FORK LENGTH	(mm) :	434
MEAN WEIGHT	(gm) :	1500.8
AGE ESTIMATE	(yr) :	2-4
# IN THE COMPOSITE (FISH):		4
PERCENT LIPID FLESH (%):		4.06
PERCENT MOISTURE FLESH (%):		78.4
LIVER (%):		N.A.

METALS IN LIVER/FLESH TISSUES
FRESH WT. BASIS (ppm)

		LIVER	FLESH
SILVER	(Ag):	N.A.	N.A.
ARSENIC	(As):	N.A.	N.A.
CADMIUM	(Cd):	N.A.	N.A.
CHROMIUM	(Cr):	N.A.	N.A.
COPPER	(Cu):	N.A.	N.A.
MERCURY	(Hg):	N.A.	N.A.
NICKEL	(Ni):	N.A.	N.A.
LEAD	(Pb):	N.A.	N.A.
SELENIUM	(Se):	N.A.	N.A.
ZINC	(Zn):	N.A.	N.A.

SYNTHETIC ORGANIC COMPOUNDS IN FLESH TISSUE

REPORTED ON:	FRESH WT. BASIS (ppm)	LIPID BASIS (ppm)
1. ALDRIN	<0.005	
2. CIS-CHLORDANE	<0.005	
3. TRANS-CHLORDANE	<0.005	
4. OXYCHLORDANE	<0.005	
5. CIS-NONACHLOR	<0.005	
6. TRANS-NONACHLOR	<0.005	
7. ALPHA CHLORDENE	<0.005	
8. GAMMA CHLORDENE	<0.005	
9. TOTAL CHLORDANE		
10. CHLORPYRIFOS	<0.010	
11. DACTHAL	0.0061	0.15
12. DDD, o,p'	<0.010	
13. DDD, p,p'	0.022	0.54
14. DDE, o,p'	<0.010	
15. DDE, p,p'	0.57	14
16. DDMS, p,p'	<0.030	
17. DDMU, p,p'	<0.015	
18. DDT, o,p'	<0.010	
19. DDT, p,p'	<0.010	
20. TOTAL DDT	0.59	14
21. DIAZINON	<0.050	
22. DICOFOL	<0.10	
23. DICHLOROBENZOPHENONE, p,p'	N.A.	
24. DIELDRIN	0.0064	0.16
25. ENDOSULFAN I	<0.005	
26. ENDOSULFAN II	N.A.	
27. ENDOSULFAN SULFATE	N.A.	
28. ENDRIN	<0.015	
29. ALPHA HCH	<0.002	
30. BETA HCH	<0.010	
31. GAMMA HCH	<0.002	
32. DELTA HCH	<0.005	
33. HEPTACHLOR EPOXIDE	<0.005	
34. HCB	<0.002	
35. PARATHION, ETHYL	<0.010	
36. PCP	N.A.	
37. TCP	N.A.	
38. PCB 1242	N.A.	
39. PCB 1248	<0.050	
40. PCB 1254	<0.050	
41. PCB 1260	<0.050	
42. TOXAPHENE	<0.10	

CODE :119.1.
N.A. = not analyzed
FRESH WT. BASIS= mg/kg of tissue = ppm
LIPID BASIS = mg/kg of lipid = ppm
Compounds listed in Table 10 and not listed above were below detection limits.

COLLECTION DATE : 10/09/85 ST.ED. NO. 723.10.45

LOCATION: FIG LAKE

FISH COMMON NAME: CHANNEL CATFISH

MEAN FORK LENGTH	(mm) :	254
MEAN WEIGHT	(gm) :	204.3
AGE ESTIMATE	(yr) :	1-2
# IN THE COMPOSITE	(FISH):	1
PERCENT LIPID	FLESH (%):	2.10
PERCENT MOISTURE	FLESH (%):	79.2
	LIVER (%):	N.A.

METALS IN LIVER/FLESH TISSUES
FRESH WT. BASIS (ppm)

		LIVER	FLESH
SILVER	(Ag):	N.A.	N.A.
ARSENIC	(As):	N.A.	N.A.
CADMIUM	(Cd):	N.A.	N.A.
CHROMIUM	(Cr):	N.A.	N.A.
COPPER	(Cu):	N.A.	N.A.
MERCURY	(Hg):	N.A.	N.A.
NICKEL	(Ni):	N.A.	N.A.
LEAD	(Pb):	N.A.	N.A.
SELENIUM	(Se):	1.7	N.A.
ZINC	(Zn):	N.A.	N.A.

SYNTHETIC ORGANIC COMPOUNDS IN FLESH TISSUE

REPORTED ON:	FRESH WT. BASIS (ppm)	LIPID BASIS (ppm)
1. ALDRIN	<0.005	
2. CIS-CHLORDANE	<0.005	
3. TRANS-CHLORDANE	<0.005	
4. OXYCHLORDANE	<0.005	
5. CIS-NONACHLOR	<0.005	
6. TRANS-NONACHLOR	<0.005	
7. ALPHA CHLORDENE	<0.005	
8. GAMMA CHLORDENE	<0.005	
9. TOTAL CHLORDANE		
10. CHLORPYRIFOS	0.052	2.5
11. DACTHAL	<0.005	
12. DDD, o,p'	<0.010	
13. DDD, p,p'	<0.010	
14. DDE, o,p'	<0.010	
15. DDE, p,p'	0.088	4.2
16. DDMS, p,p'	<0.030	
17. DDMU, p,p'	<0.015	
18. DDT, o,p'	<0.010	
19. DDT, p,p'	<0.010	
20. TOTAL DDT	0.088	4.2
21. DIAZINON	<0.050	
22. DICOFOL	<0.10	
23. DICHLOROBENZOPHENONE, p,p'	N.A.	
24. DIELDRIN	<0.005	
25. ENDOSULFAN I	<0.005	
26. ENDOSULFAN II	<0.070	
27. ENDOSULFAN SULFATE	<0.085	
28. ENDRIN	<0.015	
29. ALPHA HCH	<0.002	
30. BETA HCH	<0.010	
31. GAMMA HCH	<0.002	
32. DELTA HCH	<0.005	
33. HEPTACHLOR EPOXIDE	<0.005	
34. HCB	0.0032	0.15
35. PARATHION, ETHYL	<0.010	
36. PCP	N.A.	
37. TCP	N.A.	
38. PCB 1242	N.A.	
39. PCB 1248	<0.050	
40. PCB 1254	<0.050	
41. PCB 1260	<0.050	
42. TOXAPHENE	<0.10	

CODE :119.5.
N.A. = not analyzed
FRESH WT. BASIS= mg/kg of tissue = ppm
LIPID BASIS = mg/kg of lipid = ppm
Compounds listed in Table 10 and not listed above were below detection limits.

Attachment D
IID Drain Water Quality Improvement Program
Monitoring & Reporting Program

IMPERIAL IRRIGATION DISTRICT'S
DRAIN WATER QUALITY IMPROVEMENT PLAN
JUNE 7, 1994

INTRODUCTION

The Imperial Irrigation Distinct (IID) receives about 2.8 million acre feet per year of irrigation water for the approximately 500,000 acres of farm land in the Imperial Valley. This irrigation water is from the Colorado River and is brought into the Valley via the All-American Canal. In conjunction with an irrigation network consisting of more than 1600 miles of canals, IID has constructed and operates an agricultural drainage system consisting of about 1450 miles of surface drains. These drains were designed to collect and transport discharge waters consisting of surface and subsurface flows from the agricultural fields of the Imperial Valley and convey them to the Salton Sea.

Waters from sources other than agriculture are also transported by IID's drains and the New and Alamo Rivers into the Salton Sea. These sources include storm water flows, municipal wastewater treatment plant effluent, and industrial effluent discharges. Highly contaminated waters from Mexico enter the Imperial Valley via the New River (about 130,000 AF per year). All the aforementioned discharge sources contribute to the degradation of water quality within IID drains.

The State's Water Quality Assessment document, adopted by the State Water Resources Control Board on May 13, 1992 and by the Regional Board on January 13, 1994, classifies the Alamo River, the New River and the Salton Sea as waterbodies impaired by agricultural nonpoint sources.

On December 21, 1993, the Regional Board's Executive Officer sent a letter to Imperial Irrigation District requesting that IID take "accelerated action to address degraded water quality conditions in Imperial Valley drainage ways". In a letter of response dated January 26, 1994, IID provided to the Regional Board a tentative time schedule for implementation of a proposed "Drain Water Quality Improvement Plan". On April 6, 1994, the Regional Board responded with a letter, addressing elements of concern they considered relevant to the preparation of a Drain Water Quality Improvement Plan. Through a cooperative effort of Regional Board staff, staff members of IID and input from the April 6, 1994 letter, a Drain Water Quality Improvement Plan has been prepared by IID.

DRAIN WATER QUALITY IMPROVEMENT PLAN (Plan)

This Plan is designed to specify those actions that IID will take to protect the beneficial uses of water bodies receiving agricultural drainage flows and the time schedule and estimated cost (enclosed) for implementing those actions. IID has contracted the professional services of Jones and Stokes Associates, Inc. to prepare and initiate many of the technical elements required in the "start-up" of this Plan.

The principle intent of the Plan is to address the immediate and long term needs of the following elements:

Monitoring: Initiate a water quality monitoring program to identify and quantify the extent of drain water pollution within the IID service area.

Best Management Practices: Identify, test and implement Best Management Practices (BMPs), both on and off farm and in-stream, that have the potential to improve the drain water quality within the drainage channels of the IID.

Education: To provide an educational program to farmers within the service area of the IID.

IMPERIAL IRRIGATION DISTRICT
DRAIN WATER QUALITY IMPROVEMENT PLAN
ACTION ITEMS

1.0 SILT LOAD REDUCTION

1.1 This Plan is designed to achieve a reduction in the amount of Total Suspended Solids (i.e. sediment load) that can be discharged by agricultural drain waters. Achievement of this reduction will be determined at the outlet of the Alamo River to Salton Sea. IID recognizes that the Regional Board's current assessment of the average suspended sediment load in the Alamo River is 365 mg/L of Total Suspended Solids (TSS) in the Alamo River at Garst Road Bridge. This information is based on the Regional Board's previous ten years of quarterly sampling at this location.

2.0 BEST MANAGEMENT PRACTICES (BMPs)

2.1 IID will submit to the Regional Board within three months of the date of adoption of this Plan a list of BMPs to improve drain water quality. This list will include descriptions of all relevant BMPs already in use in the Imperial Valley, their effectiveness, their cost, and their applicability for widespread implementation.

2.2 IID will submit to the Regional Board within four months of the date of adoption of this Plan a workplan describing a program to test the pollution prevention ability and cost effectiveness of two of the proposed BMPs noted above. Initial BMPs are to focus on sediment reduction practices on-farm.

2.2.1 IID will submit additional workplans (as described above) for testing of additional BMPs to the Regional Board as needed.

2.2.2 Upon successful testing of BMPs identified in the workplans, and approval of the Regional Board, IID will implement the BMPs valley wide within a reasonable time period.

3.0 BMPs WORKPLAN

3.1 The workplans identified above in 2.2 will contain at least the following:

3.1.1 A detailed technical description of the proposed BMPs, the constituent it is designed to control, the type of crop and the type of irrigation practice that it is applicable to, and any documented history of its use elsewhere.

3.1.2 A testing program designed to quantify the amount of pollution that is prevented from entering surface waters and the cost effectiveness of the BMPs. This will include the use of a control (unaltered) field to measure the baseline discharge of constituents where applicable.

3.1.3 A sampling and analysis plan detailing the type and frequency of needed sampling.

3.1.4 A quality assurance/quality control plan to insure the validity of the testing program.

4.0 BMPs EDUCATION PROGRAM

4.1 IID will submit to the Regional Board within one year of adoption of this Plan a proposal to conduct a BMPs education and outreach program directed to the area's farmers. Upon approval of the Regional Board, the program will be implemented in a timely manner.

5.0 MONITORING

5.1 IID will immediately implement a drain water quality monitoring program (see Appendix A) to identify and quantify drain water pollution within the service area of IID.

5.2 Contained in Appendix A of this Plan are the details of the analyses to be conducted. The monitoring elements shall include:

5.2.1 Inflow Monitoring
5.2.2 Drain Water Sampling Locations
5.2.3 Chronic Toxicity Testing
5.2.4 Biological and Sediment Testing

5.3 IID will retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring, instrumentation and copies of all reports for a period of at least five years from the date of the sample, measurement, or report. Records of monitoring information will include:

5.3.1 The date, exact place, and time of sampling or measurement.
5.3.2 The name of person(s) who performed the sampling or measurement.
5.3.3 The date(s) analyses were performed.
5.3.4 The name of person(s) who performed the analyses.
5.3.5 The results of such analyses.

5.4 All monitoring contained in Appendix A will be evaluated on an annual basis. Constituents with repeated negative or consistently recurring results will be considered for elimination or for sampling on a less frequent basis.

6.0 CHRONIC TOXICITY TESTING

6.1 The initial sampling point for toxicity will be at the outlet of the Alamo River and at a representative inflow location in the All American Canal. If toxicity exceeds established limits at this location, IID will conduct a Toxicity Identification Evaluation (TIE) to determine the chemical(s) that are causing the toxicity.

6.2 IID will submit a report to the Regional Board summarizing the results of the toxicity testing as outlined in IID's Monitoring and Reporting Program (See Appendix A). This report will be submitted February 1 of each year and will include the following information:

6.2.1 A summary of all toxicity testing sample collection and laboratory analyses activities.

6.2.2 A description of any problems encountered during toxicity testing activities, including any deviations from established quality assurance/quality control procedures, and a description of all activities taken to correct past problems and prevent future problems.

6.2.3 An analysis of the testing results to determine the extent of toxicity and the relative sensitivity of the species tested.

6.2.4 Recommendations about the appropriateness of the species tested, the sampling frequency, and the sampling locations.

6.3 At the end of one year of toxicity testing, IID will make a recommendation as outlined in 6.2.4 as to the appropriateness of the species tested and any suggested change/deletion of the three tested species identified in Appendix A, 3.1.

7.0 DELINEATION OF MAJOR DRAINS

7.1 IID will submit a report to the Regional Board within six months of adoption of this Plan that delineates the major discharges into their drain water system. This report will include the following information:

7.1.1 The name, location, and annual discharge volume of the ten largest agricultural drains as measured at their points of discharge to the Alamo River, New River, or Salton Sea.

7.1.2 The sources of water in each of these ten drains will be evaluated to determine the amount of flow contributed from agricultural sources, from storm waters, from municipal wastewater treatment plants and industrial facilities having NPDES Permits, and from any other significant sources.

7.1.3 The size (in acres) of the contributory watershed of each of the ten drains and a map showing the location of these watersheds.

APPENDIX A

IMPERIAL IRRIGATION DISTRICT
DRAIN WATER QUALITY IMPROVEMENT PLAN
MONITORING AND REPORTING PROGRAM

Imperial Irrigation District will report monitoring data and report to the Regional Board in accordance with the following schedule:

1.0 INFLOW MONITORING

1.1 Water samples from the All-American Canal or other representative inflow locations will be collected quarterly and analyzed for the parameters listed below under "DRAIN WATER SAMPLING".

2.0 DRAIN WATER SAMPLING

2.1 Water samples will be collected monthly from the following locations:

2.1.1 Alamo River at Garst Road Bridge
2.1.2 New River at the USGS gauging station north of Westmorland
2.1.3 South Central Drain near its outlet to Alamo River
2.1.4 Holtville Main Drain near its outlet to Alamo River
2.1.5 Trifolium 12 Drain near its outlet to Salton Sea
2.1.6 Greeson Drain near its outlet to New River

2.2 The six drain water sampling locations listed above will be sampled as follows:

Constituent	Unit	Sample Type
Total Dissolved Solids	mg/L	Grab
Total Suspended Solids	mg/L	Grab
Volatile Suspended Solids	mg/L	Grab
Nitrate (as Nitrogen)	mg/L	Grab
Total Phosphate	mg/l	Grab
Ammonia (NH_3/NH_4^+-N)	mg/L	Grab
Hardness	mg/L	Grab
Boron	µg/L	Grab
Selenium	µg/L	Grab
pH	pH	Grab
Dissolved Oxygen	mg/L	Metered
Flow	cfs	Metered
Fecal Coliform	MPN/100 ml	Grab
Settleable Solids (30 minutes)	ml/L	Grab (field measurement)
Turbidity	NTU	Grab (field measurement)
Temperature	°C	Field Measurement
Specific Conductance	µmhos/cm	Metered

2.3 The collection, preservation, and holding times of all samples will be in accordance with U.S. EPA-approved procedures. All analyses will be conducted by a laboratory certified by the State Department of Health Services to perform the analysis, unless the Regional Board's Executive Officer allows otherwise.

3.0 CHRONIC TOXICITY TESTING

3.1 IID will conduct chronic toxicity testing on grab samples collected quarterly from the Alamo River at Garst Road Bridge and quarterly from the INFLOW MONITORING location (described above). Critical life stage toxicity tests will be conducted using three species as described below:

Species	Effect	Test Duration	Reference
fathead minnow (pimephales promelas)	larval survival and growth stage	7 days	Horning & Weber, 1989
water flea (Ceriodaphnia dubla)	survival; number of young	7 days	Horning & Weber, 1989
alga (Selanastrum capricomutum)	growth test	4 days	Horning & Weber, 1989

3.2 Toxicity Test Reference: Horning, W.B. and Weber,C.I. (eds); 1989. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms. Second edition. U.S. EPA Environmental Monitoring Systems Laboratory, Cincinnati, Ohio. EPA/600/4-89/001.

3.3 Standard dilution water should be used for these tests. The sensitivity of the test organisms to a reference toxicant will be determined concurrently with each bioassay and reported with the test results.

3.4 Chronic toxicity will be expressed and reported as toxic units (tu_c) where; tu_c = 100/NOEL and the No Observed Effect Level (NOEL) is expressed as the maximum percent effluent of test water that causes no observed effect on a test organism, as determined in a critical life stage toxicity test (indicated above).

3.5 Acute toxicity will be calculated from the results of the chronic toxicity tests described above and will be reported along with the results of each chronic test. Acute toxicity will be expressed as percent survival of the test organisms over the full testing period.

4.0 BIOLOGICAL AND SEDIMENT TESTING

4.1 IID will conduct biological and sediment testing as described below:

4.1.1 Biological: Samples of two different aquatic species, including at least one fish species, will be collected each six months from the Alamo River and/or from a large drain tributary to the Alamo River.

4.1.2 Sediment: Bottom sediment samples will be collected at the same time and location as the biological samples described above.

4.2 The biological and sediment samples described above will be analyzed for the following chemicals in accordance with the appropriate established federal and/or state guidelines:

Organics

Aldrin
Chlordane, Alpha
Chlordane, Gamma
Cis-chlordane
Cis-nonachlor
Oxychlordane
Trans-chlordane
Trans-nonachlor
Total Chlordane
Chlorpyrifos
Dacthal
DDD, o,p'
DDD, p,p'
DDE, o,p'
DDE, p,p'
DDMS, p,p'
DDMU, p,p'
DDT, o,p'
DDT, p,p'
Total DDT
Diazinon
Dichlorobenzophenone, p,p'
Dicofol (Kelthane)
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan sulfate
Total Endosulfan
Endrin
HCH, Alpha
HCH, Beta
HCH, Delta
HCH, Gamma (Lindane)
Total HCH
Heptachlor
Heptachlor Epoxide
Hexachlorobenzene
Methoxychlor
Oxadiazon
Parathlon, Ethyl
Parathlon, Methyl
PCB-1248
PCB-1254
PCB-1260
Total PCB
Pentachlorophenol
2,3,5,6-tetrachlorophenol
Toxaphene

Metals

Arsenic	Mercury
Cadmium	Nickel
Chromium	Selenium
Copper	Silver
Lead	Zinc

5.0 REPORTING

5.1 IID will prepare quarterly reports summarizing all data collected and will submit them to the Regional Board by January 15, April 15, July 15 and October 15 of each year.

Attachment E
Comment Letters and Responses

STATE OF CALIFORNIA - CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

PETE WILSON, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN • REGION 7
73-720 FRED WARING DR., SUITE 100
PALM DESERT, CA 92260
Phone (619) 346-7491
FAX (619) 341-6820

August 2, 1995

8/3
Copies to: WD
EA

AUG - 7 1995

Michael J. Clinton, General Manager
Imperial Irrigation District
P.O. Box 937
Imperial, CA 92251

RE: Agricultural Drain Ponding Project- Initial Study and Proposed Negative Declaration

This is in response to your letter of July 26, 1995 requesting comments on your proposed Negative Declaration (as referenced above). Your proposed design for construction and operation of these flow-through evaporation ponds should at a minimum address the following issues:

Monitoring needs- IID should develop and implement a regularly scheduled, long term monitoring program for these ponds that includes water and sediment monitoring, toxicity testing, and biological testing. Upstream samples, downstream (outlet) samples, and in-pond samples will be needed, but no monitoring more frequent than quarterly should be needed. Each individual pond should be monitored as a pilot project to assess its effectiveness in
A-1 improving water quality and to identify any impacts to wildlife or aquatic life. This monitoring would be similar to, and in addition to the monitoring program required by IID's Drain Water Quality Improvement Plan, Appendix A (June 7, 1994). Details of a pond monitoring program acceptable to the Regional Board should be agreed upon prior to operation of the ponds.

The reference to monitoring at the existing Fig Drain Project (p.3) is misleading if it implies
A-2 that the Regional Board has been regularly monitoring this project. Initial monitoring was done by the Regional Board on this project, but long term, regular monitoring has not been conducted by the Regional Board.

Pond design- To optimize water quality improvement and enhance wildlife habitat it is strongly recommended that you construct adequate pretreatment facilities for the ponds. These facilities would reduce the impacts caused by the pesticides and silt contained in the drain water collected by the ponds. One possible type of pretreatment system would be
A-3 desiltation basins operated upstream of the ponds. Unlike the Peach Drain Project, these basins would have to operate with sufficient retention times or utilize other features to allow the finer grained sediments to be removed and they would need to be periodically cleaned out without sending suspended sediments downstream into the ponds. The Regional Board would appreciate the opportunity to work with IID and the affected wildlife agencies in the development of a pond design that benefits rather than limits wildlife habitat and water quality improvement.

Pond operation and maintenance- The extent to which these ponds concentrate salt will potentially be a limiting factor in their operation. As flow-through systems, their design and operation should target a salinity level for their discharge which does not exceed the water quality standard for salinity in this area. This standard is 4000 mg/L of Total Dissolved Solids. Not exceeding this limit will also help to minimize the concentration of Selenium in the ponds. A-4

Your proposal to periodically clean the silt out of these ponds (Section 4, p.3) would cause downstream environmental impacts at the time of cleaning and should be reconsidered. If a proper pretreatment system is installed upstream of the ponds, it should remove any need to clean the silt out of the ponds (see above discussion). Your discussion of "Human Health" (p.4) also references cleaning silt out of the ponds and using it for drain bank construction or maintenance. Removed silt would be less likely to reenter surface waters if it was reapplied to fields (which is where it originally came from) rather than putting it on drain banks. IID's drain system has been designated by the Regional Board as having recreational beneficial uses. Avoiding potential human health impacts from these projects should be a consideration in their design and operation. The monitoring program mentioned above should provide the type of information needed to show whether human health impacts were at risk of occurring and would provide the basis for implementing corrective actions if a problem did occur. A-5

Project supervision- Based on the experience of your Peach Drain Project it is strongly recommended that you select a single project manager to oversee all aspects of this important undertaking. This project manager should have responsibility for project design, operation, and maintenance; monitoring activities and assessment of environmental impacts; environmental compliance and impact remediation; and coordination with all affected agencies. A-6

If designed and operated properly these projects have the potential to provide significant overall water quality improvement in the Imperial Valley watershed and would receive Regional Board support. If there are any questions about this letter, please contact me at (619) 346-7491.

Kenneth Coulter

Kenneth Coulter
Senior Engineering Geologist

cc: Imperial County Board of Supervisors, El Centro, CA
U. S. Fish and Wildlife Service, Salton Sea National Wildlife Refuge, Calipatria, CA
California Dept. of Fish and Game, Long Beach, CA
Karen O'Haire, SWRCB, OCC, Sacramento, CA

File: NPS GC 1.8

United States Department of the Interior

BUREAU OF LAND MANAGMENT
California State Office
2800 Cottage Way, Room E-2845
Sacramento, California 95825-1889

3200
CA-933.7

AUG 08 1995

Mr. Michel D. Remington,
Environmental Compliance Coordinator
Imperial Irrigation District
333 E. Barioni Blvd.
Imperial, California 92251

Dear Mr. Remington:

B-1 Thank you for providing this office with an opportunity to review and comment on the Initial Study for the proposed agricultural drain ponding project. Our review indicates that the project will not have an adverse effect on public lands in the general vicinity. As a result, we do not have any specific comments on the Initial Study or the project.

Sincerely,

Leroy Mahorich, Chief
Branch of Energy and Mineral Science
and Adjudication

cc: CA-067

995

External Affairs

PLANNING DEPARTMENT

IMPERIAL COUNTY

PLANNING BUILDING INSPECTION PLANNING COMMISSION

August 11, 1995

Michael D. Remmington
Environmental Compliance Coordinator
Imperial Irrigation District
333 E Barioni Blvd.
Imperial, CA 92251

SUBJECT: Agricultural Drain Ponding Projects

Dear Mr. Remmington:

The Planning/Building Department received on July 31, 1995, a copy of the CEQA initial study and proposed negative declaration for the six (6) projects intending to create approximately, 235 acres of evaporative ponds/settlement ponds at the end of five (5) drains.

C-1 We believe that the project descriptions are vague, misleading, and contradictory and the CEQA initial study and responses are the same. Without accurate project descriptions, site plans, and preliminary drawings, which clearly describe the projects it is impossible to intelligently comment.

C-2 We respectfully request that the Imperial Irrigation District Board of Directors not take action until such time that the public, as required by law, is accurately informed and given proper time to participate in the process.

Sincerely,

JURG HEUBERGER, AICP
Planning Director

BY:

John L. Morrison
Assistant Planning Director

AUG 1995

cc: Wayne Van De Graaff, Supervisor
Bill Cole, Supervisor
Dean Shores, Supervisor
Brad Luckey, Supervisor
Sam Sharp, Supervisor
Richard H. Inman, Sr., County Administrative Officer
Thomas M. Fries, County Counsel
Joanne L. Yeager, Assistant County Counsel
Richard Cabanilla, Planning Division Manager
File 10.105

JH/sjs/1103.DOC

Salton Sea National Wildlife Refuge
906 West Sinclair Road
Calipatria, CA 92233

August 10, 1995

Michael Remington
Environmental Compliance Coordinator
Imperial Irrigation District

Dear Michael,

Thank you for the opportunity to comment on your proposal to pond agricultural drain water at six locations in the Imperial Valley. While this project stands to substantially increase the fresh water wildlife habitat in the Imperial Valley, we believe that it also carries a responsibility to insure that proper monitoring and maintenance activities are conducted. These activities will ensure nesting birds are not disturbed and most importantly that these areas are not ecological traps concentrating agricultural chemicals in sediments.

The Fish and Wildlife Service considers water quality an important issue. Water entering these ponds should be reasonably free from
D-1 high and harmful levels of toxic chemicals. A comprehensive monitoring program should be established which continues for the life of the pond system.

Another concern centers around the Yuma clapper rail, a federally listed endangered species. The creation of clapper rail habitat
D-2 would be extremely beneficial, as long as the water source was reasonably free from harmful concentrations of pesticides and herbicides.

By creating these wetlands, there will undoubtedly be cattails, phragmites and perhaps even bulrush becoming established. This will attract clapper rails which appear to readily exploit any suitable fresh water marsh habitat in the Valley. This creates an added responsibility which would require constant water level maintenance and no physical disturbance to the area for the duration of their nesting period. Cooperative agreements between the USFWS and IID could be made to monitor the Yuma clapper rails using these impoundments.

Botulism is another area of concern which needs to be addressed. Stable water levels are the key to botulism avoidance, especially
D-3 in the warmer months. Water levels during the fall and winter are of less importance, although care must be taken during this period to keep water circulating to prevent botulism in migrating waterfowl and shorebirds. Creating permanent deepwater ponds (>3')

with continuous circulation may provide an easier way to deal with water level maintenance issues throughout the year.

Removal of sediments and other maintenance operations should be scheduled so as not to conflict with nesting bird species such as the clapper rail. Also, the nature of maintenance operations should be determined. Methods which will be used to control exotic species within these ponds and/or plans to control cattails and other native wetland species in these areas need to be addressed. D-4

Overall, this project could create beneficial wildlife habitat for numerous resident and migratory bird species, including the federally listed Yuma clapper rail. However, concerns over water and sediment toxicity and water control remain. The USFWS would appreciate the opportunity to work with IID and other interested parties on this project.

Sincerely,

Kenneth K. Sturm

Kenneth K. Sturm
Biological Technician

CC:
California Dept. Fish and Game
USFWS Ecological Services-Carlsbad
Regional Water Quality Control

Comment Letter E

CITY OF BRAWLEY

ECONOMIC & COMMUNITY DEVELOPMENT
CITY HALL
400 MAIN ST. PLAZA PARK
BRAWLEY, CALIFORNIA
92227
PHONE: 344 8622

August 17, 1995

Attn: Michael D. Remington, Environmental Compliance Coordinator
Imperial Irrigation District
333 E. Barion: Blvd.
Imperial, CA 92251

Subject: Initial Study and proposed Negative Declaration for the Agricultural Drain Ponding Project.

Dear Mr. Remington:

E-1 Thank you for giving the City of Brawley the opportunity to comment on said documents. We are pleased to see that the IID will be improving the drain water quality entering the New and Alamo Rivers from these ponded drains.

At this time we do not have any additional comments on the initial study or the proposed negative declaration for this project.

Sincerely,

Jerry Santillan,
City Planner

JS/bva

cc: File

AUG 1 7 199-

ESTABLISHED IN 1918 AS A PUBLIC AGENCY

COACHELLA VALLEY WATER DISTRICT

POST OFFICE BOX 1058 • COACHELLA, CALIFORNIA 92236 • TELEPHONE 619) 398-265

August 15, 1995

File: 0541.132

Michel D. Remington
Imperial Irrigation District
333 East Barioni Boulevard
Imperial, California 92251

Dear Mr. Remington:

With regard to the Initial Study and Proposed Negative Declaration for the Agricultural Drain Ponding Project, we have the following comments:

F-1 1. Our principal concern is that given the scale of the project the contribution toward the stated objective of offsetting the rising elevation of the Salton Sea will be minimal at best. Assuming an evaporation rate of six feet per year, the proposed 253 acres of ponds will evaporate a total of 1,518 acre-feet of water annually. Out of a total Salton Sea inflow of approximately 1.3 million acre-feet per year, this is only 0.12 percent.

F-2 2. On the other hand if the project were to actually have a discernible impact on inflow to the Salton Sea, it would also have a measurable effect on the Salton Sea's salinity. Nowhere is this acknowledged.

F-3 3. Since the potential effect of the proposed project is so slight, we wonder if it is only the beginning of a larger effort. If the proposed project is in fact only the first in a series of similar projects, a program environmental impact report should be prepared to evaluate the cumulative environmental impact of all agricultural drain pond projects.

F-4 4. Finally, on the initial study checklist, we suggest that items 3a and 3b be changed from "No" to "Yes." Ponding up-flowing drain water certainly qualifies as a change in current (item 3a) and in the drainage pattern (item 3b).

If you have any questions about these comments please contact Dr. Richard Thiery, biologist, extension 326.

Yours very truly,

Owen McCook
for Tom Levy
General Manager-Chief Engineer

RT:dn/el/imperial

TRUE CONSERVATION
USE WATER WISELY

Memorandum

Date :

To : 1. Project Coordinator
Resources Agency

2. Mr. Michel D. Remington
Imperial Irrigation District
333 East Barioni Boulevard
Imperial, California 92251

From : Department of Water Resources

Subject : SCH #95071100
Proposed Negative Declaration
Agricultural Drain Ponding Project
Imperial County

The Division of Safety of Dams has completed the review of the Proposed Negative Declaration dated July 19, 1995 for the proposed Agricultural Drain Ponding Project.

Based on the information provided, some of the proposed six evaporation ponds described in the Proposed Negative Declaration could fall under the jurisdiction of the Department of Water Resources, Division of Safety of Dams. Pursuant to Part 1 of Division 3 of the California Water Code, dams 25 feet or higher having a reservoir storage capacity of more than 15 acre-feet and dams higher than 6 feet having a capacity of 50 acre-feet or more would fall under State jurisdiction. If any of the proposed evaporation ponds fall under our jurisdiction, a construction application must be filed and all dam safety related issues resolved prior to approval of the application.

O-1

Thank you for the opportunity to review and comment on the Proposed Negative Declaration.

If you have any questions, please contact Field Engineer Mutaz B. Mihyar at (916) 323-1116 or Regional Engineer Richard Sanchez at (916) 322-6206.

Vernon H. Persson

Vernon H. Persson, Chief
Division of Safety of Dams
(916) 445-7606

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Field Office
2730 Loker Avenue West
Carlsbad, California 92008

August 24, 1995

Michel Remington
Imperial Irrigation District
Operating Headquarters
P.O. Box 937
Imperial County, California 92251

Re: Initial Study and Proposed Negative Declaration for the Agricultural Drain Ponding Project, Imperial County, California

Dear Mr. Remington:

The U.S. Fish and Wildlife Service (Service) has reviewed the Public Notice of Availability, Initial Study, and Proposed Negative Declaration dated July 26, 1995 for the referenced project in Imperial County, California. The primary concern and mandate of the Service is the protection of the fish and wildlife resources and their habitats. Our mandate further requires that we provide comments on any public notices issued for a Federal permit or license affecting the nation's waters (e.g., Clean Water Act, Section 404 and River and Harbor Act of 1899, Section 10). The Service is also responsible for administering the Endangered Species Act of 1973, as amended.

The proposed project will involve the construction, operation, and maintenance of six evaporation ponds at the lower end of five agricultural drains prior to their discharge into the New and Alamo Rivers. Earthen levees will be constructed in the drains to restrict water flows and increase the acreage of open water.

The proposed project is located in or near potential and possibly occupied habitat for the federally listed endangered desert pupfish (Cyprinodon macularius) and Yuma clapper rail (Rallus longirostris yumanensis). The flat-tailed horned lizard (Phrynosoma mcallii), a species proposed for federal listing, may also occur in the project area. The Service also considers the wetland and adjacent upland habitats in the vicinity of the existing agricultural drains as important habitats for other sensitive species including breeding migratory birds. The presence or absence of these and other sensitive species within the project site should be documented and included in any biological assessments or impact reports required for this project.

H-1

The Service also has several concerns relative to environmental contaminants in the creation of evaporation ponds at the ends of agricultural drains that discharge into the New or Alamo River. The ponds are likely to be attractive to wildlife, and if the ponds act as a source of contaminant collection or concentration, there is the potential for the ponds to become attractive hazards. The proposed negative declaration does not adequately support the contention that overall drain water quality will be improved by the ponding before its entering the New or Alamo Rivers. Water quality data on the Fig Drain pond [subsequently made available to the Service by Imperial Irrigation District (IID)] did not provide information to evaluate the potential hazard for several contaminants of concern, particularly selenium, organochlorines, and organophosphate pesticides.

H-2

There is potential for selenium and organochlorine pesticides to concentrate in the sediments and food chains of the evaporation ponds. Depending upon the contaminant loads in the drains and the evaporation rates of the ponds, there is the potential to create wetland areas that are of higher contamination than currently exist in those drainages. This hazard will probably be less (particularly for selenium) if the ponds are operated as a flow-through system, but it will be necessary to monitor and document the contaminant risks associated with the ponds.

It has already been documented that fish and wildlife resources living the Imperial Valley drainages have body burdens that are at levels of concern for selenium and organochlorine contamination, and some individual animals, or their eggs, have
H-3 had levels of those contaminants that impair reproductive success (Setmire et al. 1993). Because there is a very small margin between safe and toxic amount of selenium in animal diets, the addition of a few ponds that present a greater-than-current risk could be significant in terms presenting a greater overall hazard to wildlife that inhabit the area. It should be noted that in the Tulare Lakebed Area of California, where selenium in drainwater evaporation ponds presents a hazard to migratory birds, requirements mandate the development of clean wetlands as mitigation habitat.

Organophosphate and carbamate pesticides are a second group of chemicals that could be hazardous to non-target fish and wildlife in an evaporation pond situation. The work recently conducted by the California State Water Resources Control Board (1994) indicates that biotoxicity frequently exists in the Alamo River associated with the seasonal applications of malathion, diazinon, chlorpyrifos, carbofuran and carbaryl. Without any further information, there is also concern that there would be biotoxicity in the drainwater that enter the evaporation ponds.

It is the Service's understanding that chemical monitoring of water, sediment and biota is planned by IID for the evaporation

ponds, and that it would be similar to the District's drainwater quality improvement plan. The Service is interested in more information about how the planned ponds would be monitored, and how chemical risk assessments relative to the ponds would be accomplished, should the pond construction proceed.

The Service recommends that the applicant contact the U.S. Army Corps of Engineers to determine if a wetland delineation is required. If it is determined that the proposed project site supports jurisdictional waters of the United States or wetlands, the Service intends to provide additional comments pursuant to the Clean Water Act. #-4

We appreciate the opportunity to comment on your proposed project. If you have specific questions regarding contaminant issues, please contact Jewel Bennett of the Environmental Contaminants Branch of my staff at (619) 431-9440. Questions concerning wetlands and endangered species should be directed to Jeff Manning and John Bradley respectively at the same telephone number.

Sincerely,

Gail C. Kobetich
Field Supervisor

#1-6-95-TA-317

cc:
- Corps Regulatory, LA, CA (Bruce Henderson)
- Salton Sea National Wildlife (Clark Bloom)
- CDF&G, Region 5, Indio, CA (Sharon Keeney)
- California Regional Water Quality Board (Philip Gruenberg, Colorado River Basin Region)
- Bureau of Reclamation (Jim Setmire)

Literature Cited

Setmire, J.G., R.A. Schroeder, J.N. Densmore, S.L. Goodbred, D.J. Audet, and W.R. Radke. 1993. Detailed study of water quality, bottom sediments, and biota associated with irrigation drainage in the Salton Sea area, California, 1988-90. U.S. Geological Survey, Water Resources Investigation Report 93-4014. 102 pp.

State Water Resources Control Board. 1994. Colorado River Basin Toxicity Report, March 1993-February 1994. Sacramento, CA.

addresses for cc:

* Colorado River Regional Water Quality Board (Philip Gruenberg, 73-720 Fred Waring Dr., Suite 100, Palm Desert, CA 92260)

* Bureau of Reclamation (Jim Setmire, BOR, PO Box 849, Temecula, CA 92593)

DEPARTMENT OF WATER RESOURCES
P. O. BOX 29068
GLENDALE, CA 91209-9068

AUG 25 1995

Mr. Michael D. Remington
Environmental Compliance Coordinator
Imperial Irrigation District
333 E. Barioni Blvd.
Imperial, California 92251

Dear Mr. Remington:

The Department of Water Resources wishes to thank the Imperial Irrigation District for the opportunity to comment on the Proposed Negative Declaration for the Imperial Irrigation District's Agricultural Drain Ponding Project. We hope that our comments will be beneficial to you.

In general, our main concern with the Negative Declaration is its lack of information on inflow drainwater quality and sediment quality and the potential for significant impacts to the biotic environment by the bio-accumulation of selenium or other trace elements within the food web. The water quality and sediment quality information is critical in determining whether or not significant impacts might occur as a result of the project and to monitor compliance with project requirements and mitigation measures.

Specific comments on the Negative Declaration and the Initial Study/Checklist are as follows:

Negative Declaration

I-1 Page 2, Section 1.0: The ponds are described as ranging in size from 15 to 80 acres and in capacity from 30 to 500 acre-feet. This is inconsistent with the Initial Study (Appendix A, Section II) which states the ponds will range from 15 to 100 acres in size and have a capacity from between 30 to 1000 acre-feet per pond.

I-2 Page 2, Section 2.0: This section refers to Attachment A twice when Attachment B is probably the correct reference.

I-3 Page 3, Section 3.0: Additional clarification is needed on why the rise in the Salton Sea must be offset. The mention of monitoring of the Fig Drain Project by the Regional Water Quality Control Board suggests that information is available on a similar project. If this is correct, that data should be presented or referenced by this report.

Page 3, Section 4.0, Subsection Earth: The creation of over 250 acres of ponding basins that will probably require periodic sediment removal seems to indicate a significant disturbance to
I-4 the soil. The preparation and implementation of a National Pollutant Discharge Elimination System (NPDES) Stormwater Pollution Prevention Plan should mitigate any potentially significant impacts, but without this, the potential for significant impacts remain. In addition, impoundment of water will affect the soil and its structure. This may not be a detrimental impact, but without data on inflow drainwater quality and sediment analysis of similar projects (Fig Drain) a determination cannot be made on the potential for significant impacts. If the sediment does become hazardous, then sediment removal will be more complex and expensive than indicated.

The mention of the implementation of the Drainwater Quality Improvement Program indicates that data is available on drainwater quality. If so, this information should be made available or referenced as discussed above.

Page 3, Section 4.0, Subsection Water: As stated before, the need to offset the rising of the Salton Sea needs to be
I-5 clarified. The contention that drain water quality entering the New and Alamo Rivers will be improved should be supported by data or by a specific reference that can be verified.

Page 4, Section 4.0, Subsection Animal Life: The first sentence is not clear. If you mean that some animals will drown due to flooding, then say that. The enhancement of fishery and bird
I-6 habitat cannot be adequately determined without water quality information. As has been well documented by the Untied States Fish and Wildlife Service and others at both Kesterson Reservoir and the Tulare Lake Basin, agricultural drainage evaporation ponds can be hazardous to waterfowl.

Page 4, Section 4.0, Subsection Human Health: Similar to the above comment on animal life, impacts to human health are
I-7 difficult to determine without water quality and potential sediment quality information. If selenium or other trace elements are bio-accumulated within the food web, consumption of higher trophic level animals by humans can be potentially hazardous.

Page 5, Section 5.0: The finding that specific mitigation measures are not required does not agree with the previous
I-8 statements that "requirements have been placed on this project to reduce or avoid all identified effects..." It would seem that the inclusion of "requirements" is equivalent to the inclusion of mitigation measures and would necessitate the inclusion of a monitoring plan.

Attachment A, Initial Study and Checklist, Section III

1. Earth, f): If there is a "considerable silt load" in the
I-9 drainage system, then ponding water will cause a change in siltation within the streams feeding the Salton Sea or the Salton Sea itself.

3. Water, e): The ponding of drainwater will have an effect on the water quality of the water as it leaves the ponding basin due
I-10 to both evapo-transpiration and biological processes that occur within wetland areas. The explanation included indicates that this project will at least result in the change of the overall water quality entering into the New and Alamo Rivers.

5. Animal Life, a): There will be a change in the number of animals and/or species if terrestrial species are flooded and
I-11 aquatic species are attracted. Again, the explanation included with the checklist seems to agree that "yes" is a more appropriate answer than "maybe".

5. Animal Life, d): The change from terrestrial to aquatic habitat is a loss of terrestrial habitat with a corresponding
I-12 change in the number and diversity of species. It may be true, though, that the creation of aquatic habitat, if it is clean, may be an overall improvement for aquatic species.

19. Recreation, a): There seems to be a typographical error in this section. The "No" box was checked in response to the
I-13 question on recreational impacts, however, the discussion on this issue would correspond with "Maybe", as was checked above.

21. Mandatory Findings of Significance, a): As stated above,
I-14 without the proper water quality information available, it is not possible to determine impacts to waterfowl and other animals that may use these ponding basins.

21. Mandatory Findings of Significance, c): With the current threats to migratory birds from selenium and other trace elements
I-15 that are occurring in numerous locations along the Pacific Flyway, there is a potential for these ponding basins to contribute to cumulative impacts. Again, data on water quality of the drains and the expected water quality within the ponds are essential to determine the likelihood of cumulative impacts.

If you have any questions regarding our comments, please contact David Inouye at (818) 543-4600, extension 295.

Sincerely,

for Charles R. White, Chief
Southern District

CITY COUNCIL

CITY CLERK

CITY TREASURER

CITY ATTORNEY

City of Imperial

INCORPORATED 1904

CITY MANAGER

CHIEF OF POLICE

DIRECTOR OF PUBLIC WORKS / PLANNING

FINANCE OFFICER
CAROL S. [illegible], CPA

August 24, 1995

Michael J. Clinton,
General Manager
Imperial Irrigation District
P.O. Box 937
Imperial, CA 92251

RE: Mitigated Negative Declaration Agricultural Drain Ponding Project

Dear Mr. Clinton:

Thank you for giving us the chance to review the initial study and proposed negative declaration for the above project. Based on the environmental checklists prepared by your staff, it appears that this project will not have significant harmful effect to the City of Imperial or Imperial Valley as a whole. On the other hand, the project will provide beneficial impact by creating ponds for fishing and recreational facilities.

Should you have any questions, please call Harold Phelps at 355-1152.

Sincerely,

Bayani I. Mauricio
Director of P.W./Planning

BIM/sr
cc: City Council
City Manager
City Planner

cc EA (Covington)
WD

RECEIVED
AUG 28 1995
GENERAL MANAGER

CITY HALL

PUBLIC WORKS / PLANNING / BUILDING

Letter A **California Regional Water Quality Control Board (RWQCB) - Region 7**

A-1 The constructed ponds will be incorporated into IID's drain water quality monitoring program. A monitoring plan tailored for the needs of the ponds will be developed with the RWQCB before activating the ponds.

A-2 Comment noted. Reference to the RWQCB monitoring has been revised in the text of the Negative Declaration, and monitoring results are included as Attachment C.

A-3 The primary purpose for the construction of the ponds is two fold: Their purpose is to:

1. provide additional surface evaporation area for agricultural drain water prior to the drain water reaching the Salton Sea; and

2. to provide a settling area to reduce sediment loading to the rivers along with increasing detention time for the breakdown of associated residual and soluble pesticides prior to entering the rivers.

The ponds as a whole should be considered treatment systems. The RWQCB's request to have pretreatment to the treatment pond is inappropriate. However, in the interest of economical maintenance, the ponds will incorporate a primary settling area near the inlet to facilitate easy removal of as much sediment as possible. This does not preclude the possibility that the ponds will need to be drained in the future and sediment removed on a large scale.

A-4 As flow-through ponds, we feel the not-to-exceed standard of 4000 mg/l for Total Dissolved Solids is an achievable criterion. An eighteen drain survey conducted by USGS in 1994 indicated that the median TDS level was around 2045 mg/l.

A-5 All the ponds will incorporate a bypass system such that no water will flow-through the ponds during the cleaning process. This design will eliminate the possibility of downstream environmental impacts that could result from the silt removal operation.

A-6 The RWQCB's request to assign a project manager that has oversight control for the project design process, the operation and maintenance activities, the monitoring activities, the data analysis, and the environmental issues concerning assessment, impacts, and impact remediation are difficult to comply with under IID's

organizational structure. The General Superintendent of Drainage at IID can be established as a liaison for issues associated with these ponding projects should an issue arise.

Letter B **U.S. Bureau of Reclamation**

B-1 No response is required.

Letter C **Imperial County Planning Department**

C-1 Comment noted.

C-2 The California Environmental Quality Act requires a 30 day public comment period. The Proposed Negative Declaration was approved for distribution on July 25, 1995 and the 30 day public comment period closed on August 24, 1995. A public hearing was held on August 22, 1995. The IID Board of Directors will considered the Final Negative Declaration along with comments received during the comment period prior to approving the document.

Letter D **Salton Sea National Wildlife Refuge**

D-1 The constructed ponds will be incorporated into the IID's drain water quality monitoring program. A monitoring plan tailored for the needs of the ponds will be developed with the RWQCB before activating the ponds.

D-2 We believe that cattail habitat will be marginal due to the depth of the ponds as has occurred with the Fig Evaporation Pond. Should use of the ponds by Yuma Clapper Rail occur, cleaning/maintenance activities will be restricted to non-nesting months and possible cooperative agreements with USFWS will be explored.

D-3 All ponds are designed as flow-through systems, and will incorporate a bypass system such that no water will flow through the ponds during the cleaning process. This design will allow for water to be drained from ponds (not evaporated to dryness or stagnate thus lending to botulism) while a separate water source is present. It will also eliminate the possibility of downstream environmental impacts that could result from the silt removal operation.

The five drains associated with this project have been added to the IID's Drain Water Quality Improvement Plan (DWQIP). Biological and sediment testing are included in the DWQIP's monitoring and reporting program as well as toxicity testing of the drain water. A complete copy of the DWQIP will be forwarded to USFWS.

D-4 See response D-2

Letter E **City of Brawley**

E-1 No response necessary.

Letter F **Coachella Valley Water District**

F-1 Comment noted.

F-2 IID agrees that the ponding projects alone will not have a significant impact in lowering the Salton Sea. Therefore, it is acknowledged that there will not be a significant increase in the salinity of the Salton Sea. As flow-through ponds, we feel the not-to-exceed standard of 4000 mg/l for Total Dissolved Solids set by the RWQCB is an achievable criterion.

F-3 IID has not committed to any additional drain ponding projects beyond the scope of this Initial Study. As such, a Program environmental impact report is not required.

Letter G **Department of Water Resources - Division of Safety of Dams**

G-1 At this time it is anticipated that pond embankments will not exceed a height of 6 feet. Upon final design, should embankments exceed 6 feet, the Division of Safety of Dams will be contacted to determine if these agricultural ponds fall under its jurisdiction.

Letter H **U.S. Fish & Wildlife - Ecological Services**

H-1 The predominant vegetation in all of the ponding sites is Salt Cedar (*tamarix chinensis*). Based on site visits by IID staff and a visit to one of the sites with California Fish and Game personnel, no suitable habitat for the federally listed endangered Yuma Clapper Rail exists. Desert pupfish exist in drains that discharge directly into the Salton Sea. None of the five drains included in this project discharge directly into the Salton Sea and are not considered suitable habitat for the desert pupfish. The area surrounding the five drains is also not typical habitat for the Flat Tailed Horned Lizard.

IID recognizes the importance of the adjacent upland habitats for breeding migratory birds and it is anticipated that those areas will not be disturbed and will continue to exist.

Should the Army Corps of Engineers request a biological assessment, data regarding threatened and endangered species and their respective habitat will be included.

H-2 All ponds are designed as flow-through systems, and will incorporate a bypass system such that no water will flow through the ponds during the cleaning process. This design will allow for water to be drained from ponds (not evaporated to dryness or stagnate thus lending to botulism) while a separate water source is present. It will also eliminate the possibility of downstream environmental impacts that could result from the silt removal operation.

The five drains associated with this project have been added to the IID's Drain Water Quality Improvement Plan (DWQIP). Biological and sediment testing are included in the DWQIP's monitoring and reporting program as well as toxicity testing of the drain water. A complete copy of the DWQIP will be forwarded to USFWS.

H-3 See response H-2

H-4 IID has been in contact with the U.S. Army Corps of Engineers and fully intends to comply with its process to determine if wetland delineation is required.

Letter I **California Department of Water Resources**

I-1 The correct range is 15 to 80 acres in size with capacities ranging from 30-500 acre feet.

I-2 Comment noted. Correction to the document has been made.

I-3 *IID has been working in an emergency status since the first of this year in an effort to raise existing dikes surrounding the Salton Sea in order to prevent the further inundation of property. Although the Agricultural Drain Ponding Project is not part of this emergency effort,* the intent of the project is to create a greater surface area for evaporation of drainage water to occur before the water is returned to the New or Alamo Rivers and subsequently into the Salton Sea. This text has been included in the main body of the Negative Declaration (page 3).

I-4 All ponds are designed as flow-through systems, and will incorporate a bypass system such that no water will flow through the ponds during the cleaning process. This design will allow for water to be drained from ponds and will eliminate the possibility of downstream environmental impacts that could result from the silt removal operation.

The five drains associated with this project have been added to the IID's Drain Water Quality Improvement Plan (DWQIP). Biological and sediment testing are included

in the DWQIP's monitoring and reporting program as well as toxicity testing of the drain water.

I-5 See response I-3. As previously stated, the five drains included in this project will be monitored under the DWQIP.

I-6 Unlike the Kesterson Reservoir and Tulare Lake basin, all of the proposed ponds are designed as flow-through systems and will be monitored through the DWQIP in conjunction with the RWQCB.

I-7 The potential for human contact with drain water presently exists. Creation of these ponds will not increase that potential. These ponds are merely increasing the holding time of the water in the drains before releasing it into the New or Alamo Rivers. Health warnings are presently posted regarding the hazards of fish consumption from drainage waters.

I-8 While there have been restrictions placed on this project to avoid impacts, based on the initial study we believe these impacts are not significant therefore, no mitigation is necessary. However, As stated previously (response I-4), all drains included in this project have been added to the DWQIP monitoring and reporting program in conjunction with the RWQCB's request.

I-9 Comment noted. The correct response is "yes", however, the discussion remains the same.

I-10 Comment noted. The correct response is "yes", however, the discussion remains the same.

I-11 Comment noted. However, IID believes that "maybe" is the appropriate answer because we cannot predict the number of species that may or may not be flooded or attracted to the area, or if aquatic species will establish at the site. In addition, adequate terrestrial habitat exists and will continue to exist adjacent to the pond sites.

I-12 Comment noted.

I-13 Comment noted. The correct response is "maybe", however, the discussion remains the same.

I-14 Comment noted. IID has held meetings with personnel from CDFG and USFWS to discuss the possible beneficial and negative impacts. Because these ponds have been designed as flow-through systems and have been included in the DWQIP, as well as the small scale of this project, no significant impacts are expected. IID will continue to work with USFWS to ensure that negative impacts, if any, will be kept at a level

of insignificance.

I-15 See response I-14.

Letter J City of Imperial

J-1 No response necessary.

Responses to Phoned Comments

David Bloxhan August 18, 1995 "Will ponds take out any cultivated farm land?"

No. All sites will be constructed in river bottom areas that historically have been idle or never developed by agriculture. These areas are mainly covered by salt cedar.

Robert Wilson August 7, 1995 "Is a mosquito problem anticipated?"

No. Ponds will be designed as flow-through systems so that water will not stagnate and lend to the breeding of mosquitos. Should a problem arise, mosquito abatement procedures will be implemented.

United States Department of the Interior

BUREAU OF RECLAMATION
Lower Colorado Regional Office
P.O. Box 61470
Boulder City, NV 89006-1470

IN REPLY REFER TO:
LC-2501
ENV-7.00

AUG 21 1998

Mr. Phil Gruenberg
Executive Officer
California Regional Water Quality
Control Board
California Environmental Protection
Agency
73-720 Waring Drive, Suite 1000
Palm Desert CA 92260

Subject: Request for National Pollution Discharge Elimination System Permit for Proposed Brawley Wetlands Demonstration Project

Dear Mr. Gruenberg:

The Bureau of Reclamation (Reclamation) is proposing to assist the Citizen's Task Force on the New River to investigate the application of constructed wetland techniques on the New River in Southern California. The task force consists of representatives from Federal, state and local agencies, and local environmental and private groups. California EPA is represented (on the Task Force) by yourself and Mr. Jose Angel of your staff. The investigation involves construction of a demonstratoin wetland project at two locations just south of Brawley, California (see attached figures and drawings).

Two proposed research wetlands are to be constructed. The purpose of these projects is to demonstrate the ability of a wetland to improve water quality. A copy of the monitoring plan is also attached. The larger wetland's water source will be agricultural drain water while the smaller site will use New River water. Treated water leaving both wetlands will be returned to the New River and flow into the Salton Sea. Benefits from these wetlands are expected to be the improved water quality, creation of wetland wildlife habitat, and reduction of contaminates to the Salton Sea. Elemental Selenium appears to be the only major concern from wildlife agencies that are involved in the task force and wildlife agency representatives at both state and Federal levels are supportive of this project.

Since the State of California has been authorized by the EPA Administrator to issue NPDES permits, Reclamation requests your assistance in obtaining the necessary permits for the proposed action.

If you have any questions, please contact Environmental Protection Specialist Hank Kaplan at 702-293-8060.

Sincerely,

THOMAS H. SHRADER

Thomas Shrader, Manager
Environmental Compliance and Realty Group

Attachments

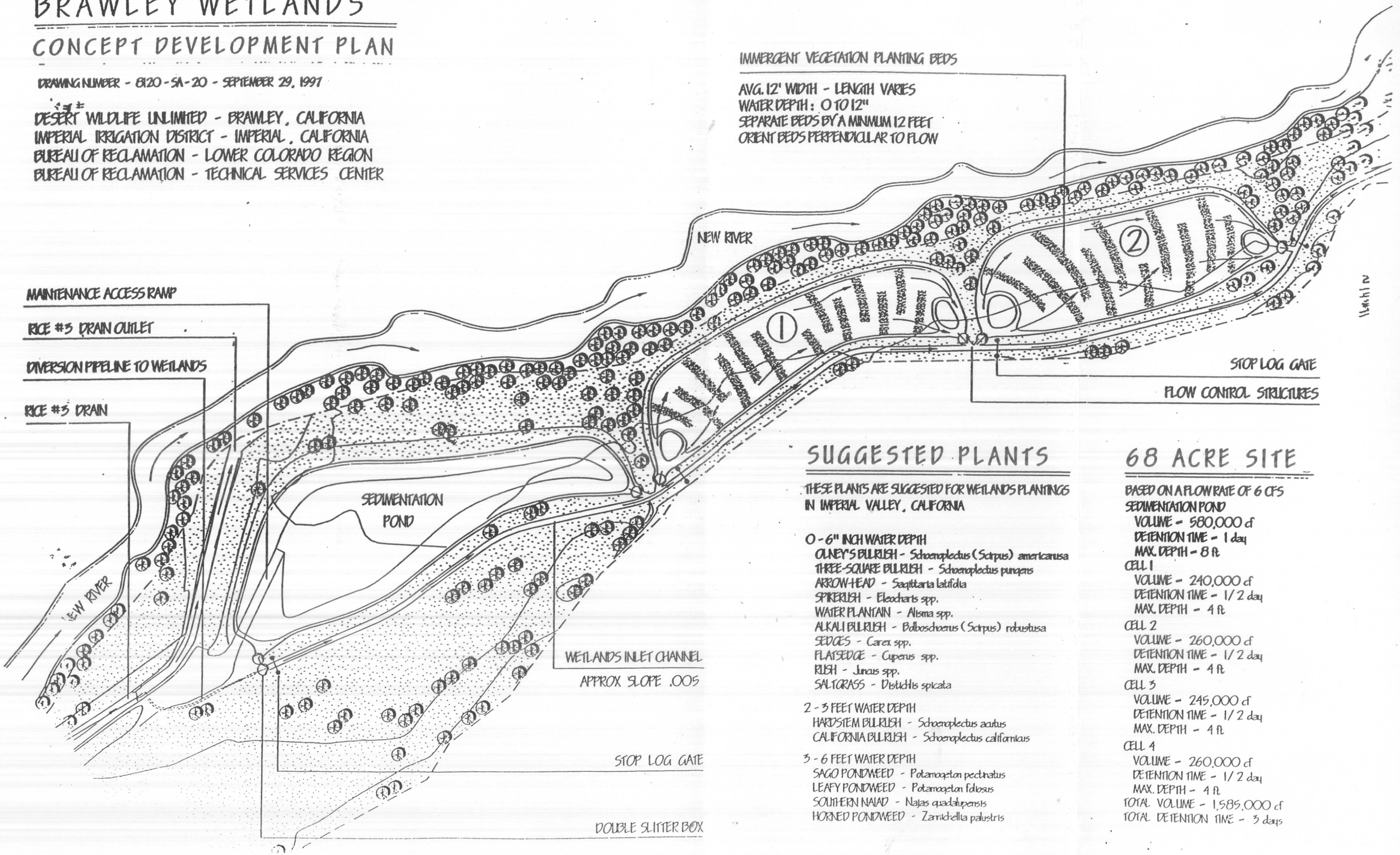
2001
Daily
WBR:HKaplan:lb:8/6/98:293-88060
(COM2200:CANPDES.HK)

BRAWLEY WETLANDS

CONCEPT DEVELOPMENT PLAN

DRAWING NUMBER - 8120-SA-20 - SEPTEMBER 29, 1997

DESERT WILDLIFE UNLIMITED - BRAWLEY, CALIFORNIA
IMPERIAL IRRIGATION DISTRICT - IMPERIAL, CALIFORNIA
BUREAU OF RECLAMATION - LOWER COLORADO REGION
BUREAU OF RECLAMATION - TECHNICAL SERVICES CENTER



SUGGESTED PLANTS

THESE PLANTS ARE SUGGESTED FOR WETLANDS PLANTINGS IN IMPERIAL VALLEY, CALIFORNIA

0 - 6" INCH WATER DEPTH
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- ARROW-HEAD - Sagittaria latifolia
- SPIKERUSH - Eleocharis spp.
- WATER PLANTAIN - Alisma spp.
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BASED ON A FLOW RATE OF 6 CFS

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- DETENTION TIME - 1 day
- MAX. DEPTH - 8 ft

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TOTAL VOLUME - 1,585,000 cf
TOTAL DETENTION TIME - 3 days

CONCEPT DEVELOPMENT PLAN

DRAWING NUMBER - 8120 - SA - 21 - SEPTEMBER 29, 1997

DESERT WILDLIFE UNLIMITED BRAWLEY, CALIFORNIA
IMPERIAL IRRIGATION DISTRICT - IMPERIAL, CALIFORNIA
BUREAU OF RECLAMATION - LOWER COLORADO REGION
BUREAU OF RECLAMATION - TECHNICAL SERVICES CENTER

4 ACRES

BASED ON A FLOW RATE OF 1 CFS

CELL 1
VOLUME - 130,000 cf
DETENTION TIME - 1-1/2 days
MAX. DEPTH - 4 ft

CELL 2
VOLUME - 96,000 cf
DETENTION TIME - 1 day
MAX. DEPTH - 4 ft

CELL 3
VOLUME - 102,000 cf
DETENTION TIME - 1-1/4 days
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TOTAL VOLUME - 328,000 cf
TOTAL DETENTION TIME - 3-3/4 days

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SCALE IN FEET FOR BOTH SITES

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TOE OF EMBANKMENT

WILDLIFE SEED CROPS
3/4 ACRE

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1/4 ACRE @ EACH CELL INLET & OUTLET. ISLAND SIDE SLOPES 2:1. PROTECT SLOPES WITH ROCK COVER.

WETLANDS INLET CHANNEL
APPROX. SLOPE .005

Match Line

68 ACRE SITE

BYPASS DRAIN

EXISTING PUMP & SUMP

NEW RIVER

MANSFIELD PIPELINE

7 ACRE SITE

COPY

New River Task Force Wetlands Project Monitoring Plan
Estimated Monitoring Costs

Costs shown include monitoring for two wetland locations. The Rice 3 Drain location consists of a settling basin and four ponds in series. The Brawley location consists of a settling basin and two ponds in series. Flow is monitored using data loggers that require weekly downloading of data. A special study of the water column will include weekly monitoring of Selenium, Nitrogen Species, Phosphorus Species, and Dissolved Oxygen in each cell for three months. Prior to, and following the completion of this special study, monitoring of the water column will consist of two sites per location which include the settling basin influent and final cell effluent.

EQUIPMENT

Flow	(4 sites)($2,000/meter) + $1,000/HP Palmtop	**$ 9,000**
Field Meas.	$850/D.O. + $200/pH + $500/Cond	**$ 1,550**
	Total Equipment Costs	**$10,550**

LAB ANALYSIS (Annually)

Major Ion Chemistry	(4 sites)(2/yr)($200)	**$ 1,600**
Nitrogen (nitrate, nitrite, ammonia, Kjeldahl)	(4 sites)(26/yr)($39) + (2 sites)(4/yr)($39) + (22 sediment sites)(2/yr)($54)	**$ 6,744**
Phosphorus (orthophosphate, total phos)	(4 sites)(26/yr)($52)	**$ 5,408**
D.O.C.	(4 sites)(12/yr)($40) + (2 sites)(4/yr)($40) + (22 sediment sites)(2/yr)($55)	**$ 4,660**
Selenium	(4 sites)(52/yr)($35) + (2 sites)(4/yr)($35) + (84 sediment sites)(2/yr)($50)	**$15,960**
Suspended Solids	(4 sites)(260/yr)($8)	**$ 8,320**
Fecal Coliform	(4 sites)(4/yr)($45)	**$ 720**
% fines < 62 µm	(22 sediment sites)(2/yr)($15)	**$ 660**
Shipping		**$ 2,000**
20% quality assurance		**$ 9,214**
	Total Annual Lab Analysis Costs	**$ 55,286**

New River Task Force Wetlands Project Monitoring Plan

LABOR (Annually)

SUSPENDED SOLIDS - Student @ $8/hr, 4hr/day, 260days/wk — **$ 8,320**
(4 sites, daily)

WATER - Sampler @ $15/hr, 5hr/wk — **$ 3,900**

Flow Data	(4 sites, 26/yr)
Field Meas.	(4 sites, 52/yr) + (2 sites, 4/yr)
M.I.C.	(4 sites, 2/yr)
Nitrogen	(4 sites, 26/yr) + (2 sites, 4/yr)
Phosphorus	(4 sites, 26/yr)
D.O.C.	(4 sites, 12/yr) + (2 sites, 4/yr)
Selenium	(4 sites, 52/yr) + (2 sites, 4/yr)
Fecal Coliform	(4 sites, 4/yr)

SEDIMENTS - 2 Biologists @ $500/day, 2 days, 2/yr — **$ 4,000**

Nitrogen	(22 sites, 2/yr)
D.O.C.	(22 sites, 2/yr)
Selenium	(22 sites, 2/yr)
% fines	(22 sites, 2/yr)

INVERTEBRATES - 2 Biologists @ $500/day, 4 days, 2/yr — **$ 8,000**

Selenium	(22 sites, 2/yr)

BIOTA - 2 Biologists @ $500/day, 2 days, 2/yr — **$ 4,000**

Selenium	(10 sites, 2/yr)

PLANTS - 2 Biologists @ $500/day, 2 days, 2/yr — **$ 4,000**

Selenium	(30 sites, 2/yr)

Total Annual Labor Costs **$32,220**

SPECIAL STUDIES

Wildlife Surveys
(2 Biologists)(2 locations)(5 days/season)(4 seasons)($500/day) +
(25% analyze & report) **$50,000**

Disease Monitoring
Required only if dead birds are found

Pesticide Analysis
(2 locations)(2 sites)(2/yr)($600) **$ 4,800**

Time of Travel
(3 people)(10 days)($300/day) **$ 9,000**

Bioaccumulators
(2 locations)[(5 eggs)($35) + (1 composite)(2 sites)($150)] +
(1 Biologist @ $500/day)(2 days) **$ 1,950**

Water Column
(16 sites)(12 sample dates)($35 + $39 + $52) +
Sampler @ $15/hr, 1 day, 12 sample dates **$25,632**

TOTAL **$91,382**

3-YR PROJECT COST SUMMARY

Equipment	**$ 10,550**
Lab Analysis	**$165,858**
Labor	**$ 96,660**
Special Studies	**$ 91,382**
Total Proposed 3-yr Monitoring Plan Costs	**$364,450**

Peter M. Rooney
Secretary for Environmental Protection

California Regional Water Quality Control Board
Colorado River Basin Region

73-720 Fred Waring Drive, Suite 100, Palm Desert, California 92260
Phone (760) 346-7491 • FAX (760) 341-6820

Pete Wilson
Governor

November 12, 1998

Mr. Thomas Shrader, Manager
Environmental Compliance and Realty Group
United States Department of the Interior
Bureau of Reclamation
Boulder City, NV 89006-1470

11/24 JH 2500

2001
1400

RE: PROPOSED BRAWLEY WETLANDS DEMONSTRATION PROJECT – NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

This letter follows up on the November 5, 1998, teleconference meeting that Jose L. Angel of our staff had with Steve Muth of your staff and Leon Lesicka of Desert Wildlife Unlimited, Inc. (DWLUI), regarding the subject matter and your letter of August 21, 1998. Your letter requests our assistance in obtaining the necessary NPDES permits for the aforementioned project.

PROJECT DESCRIPTION

The Bureau of Reclamation proposes to assist DWLUI, Imperial County, and Imperial Irrigation District (IID) to construct a 7-acre and a 68-acre wetlands to improve agricultural drain and New River water quality. The proposed 7-acre wetland is about 1.5 miles southwest of Brawley, along the east bank of the New River, just northwest of the intersection of the Central Main Canal and Rockwood Road, in Section 6, T13S, R13E, SBB&M. The proposed 68-acre wetland is about 2.5 miles northwest from Imperial, in Section 5, T14S, R12E, SBB&M. Both wetland sites are owned by IID. The proposed project will be owned by the Bureau of Reclamation and operated by the Bureau of Reclamation, IID, DWLUI, and Imperial County. The Bureau of Reclamation proposes to discharge treated water from both wetlands into the New River.

You proposal includes a three-year comprehensive monitoring program for both wetlands. The program includes monitoring of the influent and effluent from the wetlands for flow, major ions, nitrogen, phosphorous, dissolved oxygen, selenium, and suspended solids, fecal coliform, and pesticides; monitoring of biota and plants for selenium; and monitoring of bird eggs for bioaccumulation of constituents of concern. Your monitoring program has been developed in consultation with staff from the United States Fish and Wildlife Service, United States Geological Survey, California Department of Fish and Game, University of California-Riverside, and Imperial County among others.

NPDES PERMIT/ WASTE DISCHARGE REQUIREMENTS

The Federal Water Pollution Control Act (a.k.a. Clean Water Act) requires that NPDES permits contain criteria to ensure that discharges of pollutants into waters of the United States do not violate the water quality standards established for the waters. The standards establish water quality goals by designating beneficial use(s) for a specific water body and serve as the regulatory basis for the establishment of water-quality-based effluent limitations and controls (40CFR131.2). The State of California has been delegated authority by the United States Environmental Protection Agency (USEPA) to implement the NPDES program throughout the state.

Title II of the recently enacted federal legislation entitled the "Salton Sea Reclamation Act of 1998" authorizes the Bureau of Reclamation, acting on behalf of the U.S. Secretary of the Interior, to construct the subject wetlands for research purposes. Further, our review of the subject legislation indicates that Title II exempts the Bureau of Reclamation from having to comply with the water quality standards of the Clean Water Act for the project, provided the water from the wetlands is discharged into either the Alamo or the New Rivers. Because Congress has provided the Bureau of Reclamation with the exemption, and in consultation with the USEPA, we have determined that **waste discharge requirements for this project are not necessary.**

Please keep us informed on the status of the project on a periodic basis (e.g., monthly updates) and send us copies of the monitoring results as they become available.

If you have any questions about this matter, please call Jose L. Angel at (760) 776-8932.

PHIL GRUENBERG
Executive Officer

JLA/jr

cc: Ms. Alexis Strauss, United State Environmental Protection Agency, Region IX, San Francisco
Ms. Eugenia McNaughton, United State Environmental Protection Agency, San Francisco
Mr. Bill Steele, United States Department of the Interior, Bureau of Reclamation, Boulder
Mr. Steve Muth, United States Department of the Interior, Bureau of Reclamation, Boulder
Mr. Jim Setmire, United States Department of the Interior, Bureau of Reclamation, Temecula
Mr. Terry Dean, United States Army Corps of Engineers, San Diego
Mr. Bart Christensen, State Water Resources Control Board, CWP, Sacramento
Mr. Tom Wolfe, Imperial County Environmental Health Department, El Centro
Ms. Marie Barrett, Imperial Valley College, Imperial
Mr. Tom Kirk, Salton Sea Authority, Indio
Ms. Jeanie Snyder, Imperial Irrigation District, Imperial
Mr. Leon Lesicka, DWLUI, Brawley

Attachment 4

NPDES Correspondence
w/Monitoring and Operation Plan

250

United States Department of the Interior

BUREAU OF RECLAMATION
Lower Colorado Regional Office
P.O. Box 61470
Boulder City, NV 89006-1470

IN REPLY REFER TO:
LC-2501
ENV-7.00

AUG 2 1 1998

Mr. Phil Gruenberg
Executive Officer
California Regional Water Quality
Control Board
California Environmental Protection
Agency
73-720 Waring Drive, Suite 1000
Palm Desert CA 92260

Subject: Request for National Pollution Discharge Elimination System Permit for Proposed Brawley Wetlands Demonstration Project

Dear Mr. Gruenberg:

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Since the State of California has been authorized by the EPA Administrator to issue NPDES permits, Reclamation requests your assistance in obtaining the necessary permits for the proposed action.

If you have any questions, please contact Environmental Protection Specialist Hank Kaplan at 702-293-8060.

Sincerely,

THOMAS H. SHRADER

Thomas Shrader, Manager
Environmental Compliance and Realty Group

Attachments

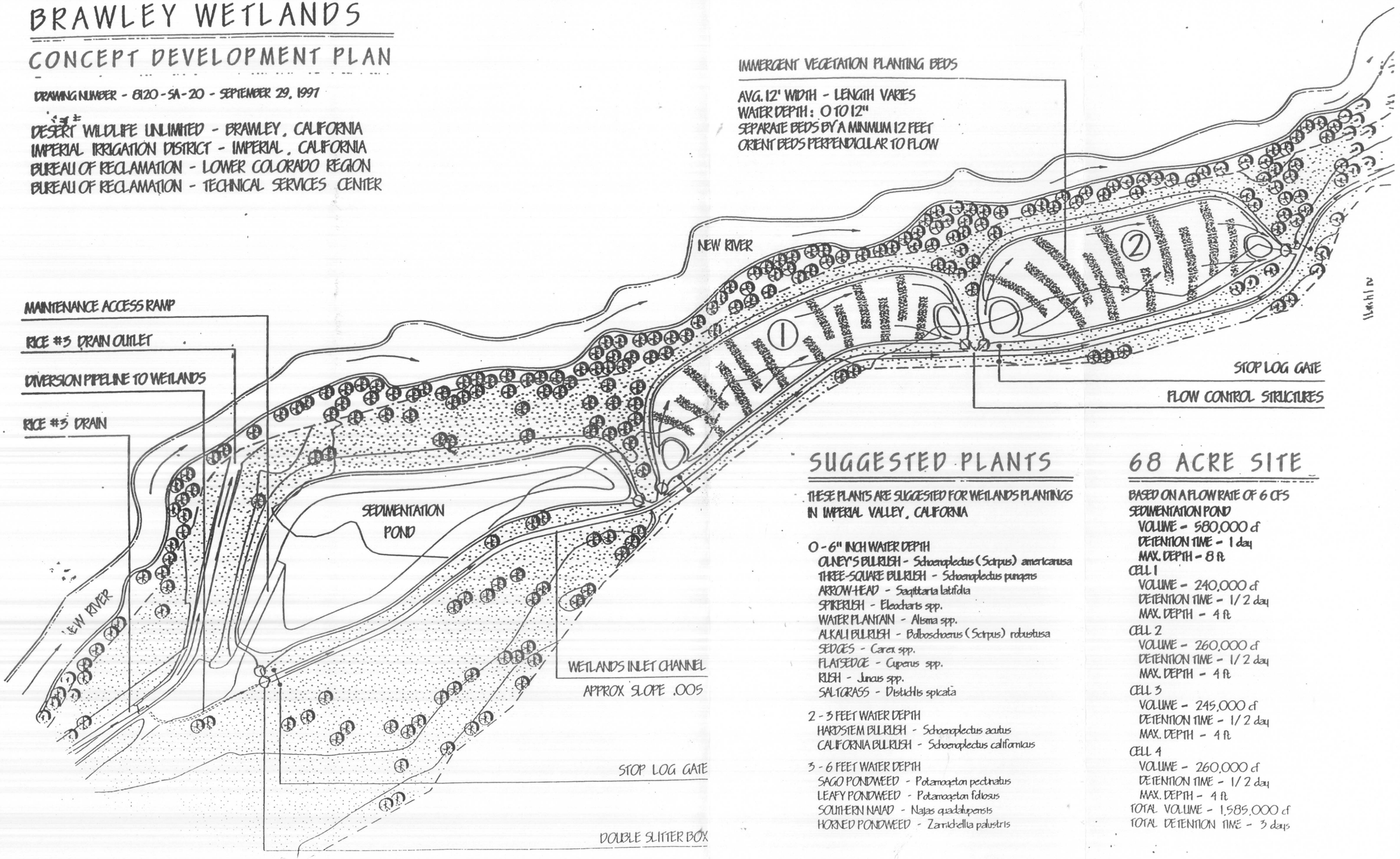
2001
Daily
WBR:HKaplan:lb:8/6/98:293-88060
(COM2200:CANPDES.HK)

BRAWLEY WETLANDS

CONCEPT DEVELOPMENT PLAN

DRAWING NUMBER - 8120-SA-20 - SEPTEMBER 29, 1997

DESERT WILDLIFE UNLIMITED - BRAWLEY, CALIFORNIA
IMPERIAL IRRIGATION DISTRICT - IMPERIAL, CALIFORNIA
BUREAU OF RECLAMATION - LOWER COLORADO REGION
BUREAU OF RECLAMATION - TECHNICAL SERVICES CENTER



SUGGESTED PLANTS

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IMPERIAL IRRIGATION DISTRICT - IMPERIAL, CALIFORNIA
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BUREAU OF RECLAMATION - TECHNICAL SERVICES CENTER

NORTH

0 100 200 300 400 500

SCALE IN FEET FOR BOTH SITES

WILDLIFE SEED CROPS
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NEW RIVER

TOE OF EMBANKMENT

NEW RIVER

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APPROX. SLOPE .005

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New River Task Force Wetlands Project Monitoring Plan

COPY

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Major Ion Chemistry	(4 sites)(2/yr)($200)	**$ 1,600**
Nitrogen (nitrate, nitrite, ammonia, Kjeldahl)	(4 sites)(26/yr)($39) + (2 sites)(4/yr)($39) + (22 sediment sites)(2/yr)($54)	**$ 6,744**
Phosphorus (orthophosphate, total phos)	(4 sites)(26/yr)($52)	**$ 5,408**
D.O.C.	(4 sites)(12/yr)($40) + (2 sites)(4/yr)($40) + (22 sediment sites)(2/yr)($55)	**$ 4,660**
Selenium	(4 sites)(52/yr)($35) + (2 sites)(4/yr)($35) + (84 sediment sites)(2/yr)($50)	**$15,960**
Suspended Solids	(4 sites)(260/yr)($8)	**$ 8,320**
Fecal Coliform	(4 sites)(4/yr)($45)	**$ 720**
% fines < 62 µm	(22 sediment sites)(2/yr)($15)	**$ 660**
Shipping		**$ 2,000**
20% quality assurance		**$ 9,214**
	Total Annual Lab Analysis Costs	**$ 55,286**

New River Task Force Wetlands Project Monitoring Plan

LABOR (Annually)

SUSPENDED SOLIDS - Student @ $8/hr, 4hr/day, 260days/wk (4 sites, daily) — **$ 8,320**

WATER - Sampler @ $15/hr, 5hr/wk — **$ 3,900**

Flow Data	(4 sites, 26/yr)
Field Meas.	(4 sites, 52/yr) + (2 sites, 4/yr)
M.I.C.	(4 sites, 2/yr)
Nitrogen	(4 sites, 26/yr) + (2 sites, 4/yr)
Phosphorus	(4 sites, 26/yr)
D.O.C.	(4 sites, 12/yr) + (2 sites, 4/yr)
Selenium	(4 sites, 52/yr) + (2 sites, 4/yr)
Fecal Coliform	(4 sites, 4/yr)

SEDIMENTS - 2 Biologists @ $500/day, 2 days, 2/yr — **$ 4,000**

Nitrogen	(22 sites, 2/yr)
D.O.C.	(22 sites, 2/yr)
Selenium	(22 sites, 2/yr)
% fines	(22 sites, 2/yr)

INVERTEBRATES - 2 Biologists @ $500/day, 4 days, 2/yr — **$ 8,000**

Selenium	(22 sites, 2/yr)

BIOTA - 2 Biologists @ $500/day, 2 days, 2/yr — **$ 4,000**

Selenium	(10 sites, 2/yr)

PLANTS - 2 Biologists @ $500/day, 2 days, 2/yr — **$ 4,000**

Selenium	(30 sites, 2/yr)

Total Annual Labor Costs **$32,220**

SPECIAL STUDIES

Wildlife Surveys
(2 Biologists)(2 locations)(5 days/season)(4 seasons)($500/day) +
(25% analyze & report) **$50,000**

Disease Monitoring
Required only if dead birds are found

Pesticide Analysis
(2 locations)(2 sites)(2/yr)($600) **$ 4,800**

Time of Travel
(3 people)(10 days)($300/day) **$ 9,000**

Bioaccumulators
(2 locations)[(5 eggs)($35) + (1 composite)(2 sites)($150)] +
(1 Biologist @ $500/day)(2 days) **$ 1,950**

Water Column
(16 sites)(12 sample dates)($35 + $39 + $52) +
Sampler @ $15/hr, 1 day, 12 sample dates **$25,632**

TOTAL **$91,382**

3-YR PROJECT COST SUMMARY

Equipment	**$ 10,550**
Lab Analysis	**$165,858**
Labor	**$ 96,660**
Special Studies	**$ 91,382**
Total Proposed 3-yr Monitoring Plan Costs	**$364,450**

Peter M. Rooney
Secretary for Environmental Protection

California Regional Water Quality Control Board
Colorado River Basin Region

Pete Wilson
Governor

73-720 Fred Waring Drive, Suite 100, Palm Desert, California 92260
Phone (760) 346-7491 • FAX (760) 341-6820

November 12, 1998

Mr. Thomas Shrader, Manager
Environmental Compliance and Realty Group
United States Department of the Interior
Bureau of Reclamation
Boulder City, NV 89006-1470

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RE: PROPOSED BRAWLEY WETLANDS DEMONSTRATION PROJECT – NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

This letter follows up on the November 5, 1998, teleconference meeting that Jose L. Angel of our staff had with Steve Muth of your staff and Leon Lesicka of Desert Wildlife Unlimited, Inc. (DWLUI), regarding the subject matter and your letter of August 21, 1998. Your letter requests our assistance in obtaining the necessary NPDES permits for the aforementioned project.

PROJECT DESCRIPTION

The Bureau of Reclamation proposes to assist DWLUI, Imperial County, and Imperial Irrigation District (IID) to construct a 7-acre and a 68-acre wetlands to improve agricultural drain and New River water quality. The proposed 7-acre wetland is about 1.5 miles southwest of Brawley, along the east bank of the New River, just northwest of the intersection of the Central Main Canal and Rockwood Road, in Section 6, T13S, R13E, SBB&M. The proposed 68-acre wetland is about 2.5 miles northwest from Imperial, in Section 5, T14S, R12E, SBB&M. Both wetland sites are owned by IID. The proposed project will be owned by the Bureau of Reclamation and operated by the Bureau of Reclamation, IID, DWLUI, and Imperial County. The Bureau of Reclamation proposes to discharge treated water from both wetlands into the New River.

You proposal includes a three-year comprehensive monitoring program for both wetlands. The program includes monitoring of the influent and effluent from the wetlands for flow, major ions, nitrogen, phosphorous, dissolved oxygen, selenium, and suspended solids, fecal coliform, and pesticides; monitoring of biota and plants for selenium; and monitoring of bird eggs for bioaccumulation of constituents of concern. Your monitoring program has been developed in consultation with staff from the United States Fish and Wildlife Service, United States Geological Survey, California Department of Fish and Game, University of California-Riverside, and Imperial County among others.

NPDES PERMIT/ WASTE DISCHARGE REQUIREMENTS

The Federal Water Pollution Control Act (a.k.a. Clean Water Act) requires that NPDES permits contain criteria to ensure that discharges of pollutants into waters of the United States do not violate the water quality standards established for the waters. The standards establish water quality goals by designating beneficial use(s) for a specific water body and serve as the regulatory basis for the establishment of water-quality-based effluent limitations and controls (40CFR131.2). The State of California has been delegated authority by the United States Environmental Protection Agency (USEPA) to implement the NPDES program throughout the state.

Title II of the recently enacted federal legislation entitled the "Salton Sea Reclamation Act of 1998" authorizes the Bureau of Reclamation, acting on behalf of the U.S. Secretary of the Interior, to construct the subject wetlands for research purposes. Further, our review of the subject legislation indicates that Title II exempts the Bureau of Reclamation from having to comply with the water quality standards of the Clean Water Act for the project, provided the water from the wetlands is discharged into either the Alamo or the New Rivers. Because Congress has provided the Bureau of Reclamation with the exemption, and in consultation with the USEPA, we have determined that **waste discharge requirements for this project are not necessary.**

Please keep us informed on the status of the project on a periodic basis (e.g., monthly updates) and send us copies of the monitoring results as they become available.

If you have any questions about this matter, please call Jose L. Angel at (760) 776-8932.

PHIL GRUENBERG
Executive Officer

JLA/jr

cc: Ms. Alexis Strauss, United State Environmental Protection Agency, Region IX, San Francisco
Ms. Eugenia McNaughton, United State Environmental Protection Agency, San Francisco
Mr. Bill Steele, United States Department of the Interior, Bureau of Reclamation, Boulder
Mr. Steve Muth, United States Department of the Interior, Bureau of Reclamation, Boulder
Mr. Jim Setmire, United States Department of the Interior, Bureau of Reclamation, Temecula
Mr. Terry Dean, United States Army Corps of Engineers, San Diego
Mr. Bart Christensen, State Water Resources Control Board, CWP, Sacramento
Mr. Tom Wolfe, Imperial County Environmental Health Department, El Centro
Ms. Marie Barrett, Imperial Valley College, Imperial
Mr. Tom Kirk, Salton Sea Authority, Indio
Ms. Jeanie Snyder, Imperial Irrigation District, Imperial
Mr. Leon Lesicka, DWLUI, Brawley

Attachment 5

Section 7 Correspondence
(Endangered Species Act)

United States Department of the Interior
Fish and Wildlife Service
Ecological Services
Carlsbad Fish and Wildlife Office
2730 Loker Avenue West
Carlsbad, California 92008

In Reply Refer To: 1-6-00-I-3

MEMORANDUM

To: Manager, Environmental Compliance and Realty Group
Bureau of Reclamation, Boulder City, Nevada

From: Assistant Field Supervisor, Fish and Wildlife Service, Carlsbad, California

Nancy Gilbert

Subject: Informal Consultation on the Brawley Wetlands Project

This responds to your correspondence dated January 6, 2000, regarding your conclusions relative to impacts to endangered species as a result of the proposed Brawley wetlands project. While an adverse effect to Yuma clapper rails is still possible, the current design of the project with strips of emergent vegetation rather than large blocks should discourage use by Yuma clapper rails and make an adverse effect unlikely. Because the Bureau of Reclamation, along with the other parties to the planning agreement, have agreed to act per our recommendations should adverse effects be identified, we concur with your determination regarding the Yuma clapper rail. No additional consultation is required prior to commencement of construction activities.

This project is considered a pilot project by design and the parties to the Planning Agreement do not have an obligation to continue the project beyond its scheduled operational life of 3 years. If the project is deemed successful at the conclusion of the 3-year pilot project, additional measures will be required to avoid any potential long-term adverse effects to the Yuma clapper rail. The existing plan for wildlife surveys and chemical monitoring will need to continue until it can be demonstrated to the satisfaction of the Fish and Wildlife Service that the wetlands do not pose an increased risk of disease or contaminant impacts over and above the current level.

We hope that this project will be successful in achieving its goal of improving water quality in the New River without impacts to fish and wildlife resources. In the long-term, we hope to see benefits to wildlife in improvement of downstream water quality and increases in habitat availability. We will continue to provide technical assistance to assist the New River Task Force in improving the quality of habitat in the Imperial Valley for all of its residents. Please contact Carol Roberts of my staff at (760) 431-9440 if you have any questions.

United States Department of the Interior

BUREAU OF RECLAMATION
Lower Colorado Regional Office
P.O. Box 61470
Boulder City, NV 89006-1470

IN REPLY REFER TO:
LC-2501
PRJ-1.10

JAN 0 6 2000

MEMORANDUM

To: Mr. John Hanlon, Fish and Wildlife Service, 2730 Loker Avenue West, Carlsbad CA 92008

From: Deanna J. Miller, Director
Resource Management Office

Subject: Informal Consultation on the Brawley Wetlands Project (File No. 1-6-00-I3)

Thank you for your memorandum dated November 16, 1999, on our request for consultation on the above noted project. The following are our responses to your concerns and comments on our request for concurrence with our determination of effects on listed species.

We agree with your determination that the desert pupfish (*Cyprinodon macularius*) may be beneficially affected by the project and therefore change our effect determination that the project will not affect the pupfish to "is not likely to adversely affect" that species. However, Reclamation notes that we cannot quantify water quality improvements downstream and to pupfish habitat as the water is released from the wetlands and mixed with New River water.

We also agree with your position that to avoid effects to the southwestern willow flycatcher (*Empidonax traillii extimus*), there will be no dense planting of any potential nesting trees. The outfall location was changed from the New River to an existing agricultural drainage so that potential damage to riparian habitat has been eliminated. As a result, the potential for damage or removal of willows, or similar nesting trees, was also eliminated from Section D - **Environmental Mitigation Commitments**. No planting is proposed for the project and suitable habitat for the willow flycatcher will not be created. An affect determination of "not likely to adversely affect" is appropriate under these conditions.

Reclamation disagrees with the Service's determination that adverse impacts to Yuma clapper rail (*Rallus longirostris yumanensis*) would occur from bio-accumulation of waterborne contaminants. The project is designed with vegetation strips which will discourage Yuma clapper rail occupation

at the wetland facility, thus no bio-accumulation of waterborne contaminants should occur. Also, monitoring commitments are designed to further reduce potential adverse impacts to rails. The effects, if any, of wetland operation or level of waterborne contaminants that may occur in the wetland cells are undetermined at this time. One of the components of the monitoring plan is to monitor levels of water-borne contaminants, specifically selenium and pesticides such as DDT.

Should any Yuma clapper rail occupy the site despite our design efforts to exclude them, your recommendations on shutting down the project, in Section 6.3 of the planning agreement, will be implemented. Specifically, should the project present a threat to wildlife it will be modified or stopped and the threatening condition remediated to a pre-construction condition. We anticipate that the Fish and Wildlife Service (FWS) would be as intimately involved with the decommissioning of the project as it has been in its formulation and planning. Timely reports will be provided to the FWS representative associated with the Brawley Wetlands Project. Based on data evaluation as the project progresses, or in the event that a threatening condition is recognized, the National Wildlife Health Center will be consulted. As suggested, if project termination is required, and Yuma clapper rail are present on site, the termination will occur during the rail's non-breeding season (October 1 through March 1). The pond will be drained and no post-project construction activities permitted for the following 3-weeks so that any occupants on site will have time to relocate. The same guidelines will be applied to project operation and maintenance.

If project data indicates that continued operation of the Brawley Wetlands beyond the 3 year research period is beneficial, then the potential effects of that operation will be evaluated in another environmental document and Section 7 consultation. While much information for an environmental assessment of long-term wetland operation is contained in the current environmental assessment of the project, some critical questions remain that can only be answered by the research effort. We believe that continued operation will require a re-evaluation in light of the research data available at that time and, with FWS consultation, a decision will be made as to what monitoring protocols may be necessary. We anticipate that a monitoring program will be implemented to assess any long term effects. However, the monitoring specifics are undetermined at this time.

If you have any questions, please contact Mr. Henri Kaplan at 702-293-8060.

Deanna J. Miller

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United States Department of the Interior
Fish and Wildlife Service
Ecological Services
Carlsbad Fish and Wildlife Office
2730 Loker Avenue West
Carlsbad, California 92008

OFFICIAL FILE COPY
RECEIVED NOV 18 1999
REPLY DATE

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		2001
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Classification
Project
Control No.
Folder I.D.
Keyword
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In Reply Refer To: 1-6-00-I-3

MEMORANDUM

To: Manager, Environmental Compliance and Realty Group
Bureau of Reclamation, Boulder City, Nevada

From: Division Chief for Imperial and Eastern Riverside Counties
Fish and Wildlife Service, Carlsbad, California

Subject: Informal Consultation on the Brawley Wetlands Project

This responds to your correspondence dated March 5, 1999, regarding your conclusions relative to impacts to endangered species as a result of the proposed Brawley wetland project. We concur with your no affect determination for the threatened Peirson's milk-vetch (*Astragalus magdalenae* var. *peirsonii*), the threatened Aleutian Canada goose (*Branta canadensis leucopareia*), and the endangered brown pelican (*Pelecanus occidentalis*). The American peregrine falcon (*Falco peregrinus anatum*) is no longer listed and will not need to be addressed further.

We do not concur with a no affect determination for the desert pupfish (*Cyprinodon macularius*). However, because the likelihood of adverse impacts is extremely low and the fact that benefits to this species may be possible, we would concur with a determination that this project is not likely to adversely affect the desert pupfish.

We do not concur with your determination of not likely to adversely affect the southwestern willow flycatcher (*Empidonax traillii extimus*). The project may result in the creation of habitat in close proximity to agriculture. This may encourage southwestern willow flycatchers to forage or nest in this area, and as a result they could be subjected to pesticide exposures that may impact their reproductive success. To minimize the potential for adverse effects to the southwestern willow flycatcher, nesting trees such as willows, mesquite, and *Baccharis* sp. should not be planted in dense stands that would be attractive to this species for nesting as part of this project. Plantings should be conducted in an open pattern with space between individual trees when

grown out. Restoration efforts for this species should be focused on areas away from active agriculture where potential exposure to pesticides and disturbance can be minimized.

We also do not concur with your determination of not likely to adversely affect the Yuma clapper rail (*Rallus longirostris yumanensis*). The Yuma clapper rail may be subjected to bioaccumulation of water-borne contaminants (e.g., selenium, and sediment-sorbed DDT's), which may impact their reproduction if they move into the wetlands ponds. In addition, Yuma clapper rails may be impacted by discontinuing the project if they have moved in during its scheduled 3-year life span.

The current design of the project with strips of emergent vegetation rather than large blocks should discourage use by Yuma clapper rails. However, should rails come to occupy the site, we will need to be prepared to act in order to prevent adverse impacts from disease or contaminant bioaccumulation. The current Planning Agreement between Desert Wildlife Unlimited, Imperial Irrigation District, and the Bureau of Reclamation specifically states in Article 6.3 that if the project presents a threat to wildlife in the area, the project, or portion thereof causing the threat, will be modified or stopped and the threatening/toxic condition will be remediated to a safe or pre-construction condition. We fully support this provision in the Planning Agreement as necessary and appropriate to avoid or minimize wildlife impacts associated with contaminants and disease. We have technical expertise on our staff to assist you in making the determination as to if a threat of toxic or reproductive impacts exists. To avoid any adverse effects to the Yuma clapper rail, the Fish and Wildlife Service must receive timely reports of the wildlife surveys and monitoring efforts to evaluate the potential threat before an adverse effect actually occurs. We recommend that the National Wildlife Health Center be consulted to determine if a threat of disease is present at either project site based on wildlife surveys, monitoring reports, and daily observations.

This project is considered a pilot project by design and the parties to the Planning Agreement do not have an obligation to continue the project beyond its scheduled operational life of 3 years. If Yuma clapper rails have come to occupy the project during that time, the project may be discontinued provided the following guidance is followed in shutting the project down. Project termination must occur during the non-breeding season for the Yuma clapper rail (i.e., October 1 through March 1). This termination will entail first draining the ponds to encourage any occupants to move to other areas. Once drained, an additional 3 weeks should be allowed to lapse before any post-project construction activities begin to assure dispersal of occupants. After that time, any post-project construction activities may proceed. Routine maintenance should also follow the same procedures if Yuma clapper rails have occupied the site(s).

If the project is deemed successful at the conclusion of the 3-year pilot project, additional measures will be required to avoid any potential long-term adverse effects to the Yuma clapper rail. The existing plan for wildlife surveys and chemical monitoring will need to continue until it can be demonstrated to the satisfaction of the Fish and Wildlife Service that the wetlands do not pose an increased risk of disease or contaminant impacts over and above the current level.

We hope that this project will be successful in achieving its goal of improving water quality in the New River without impacts to fish and wildlife resources. In the long-term, we hope to see benefits to wildlife in improvement of downstream water quality and increases in habitat availability. We will continue to provide technical assistance to assist the New River Task Force in improving the quality of habitat in the Imperial Valley for all of its residents. Please contact Carol Roberts of my staff at (760) 431-9440 if you have any questions.

United States Department of the Interior

BUREAU OF RECLAMATION
Lower Colorado Regional Office
P.O. Box 61470
Boulder City, NV 89006-1470

IN REPLY REFER TO:

LC-2501
ENV-7.00

MAR 05 1999

MEMORANDUM

To: Mr. John Hanlon, Chief, Branch of Federal Projects, U.S. Fish and Wildlife Service, 2730 Loker Avenue West, Carlsbad CA 92008

From: Thomas Shrader, Manager
Environmental Compliance and Realty Group

Subject: Informal Consultation under Sections 7(a) and (c) of the Endangered Species Act (ESA) for the Proposed Brawley Wetlands Project

The Citizens Congressional Task Force on the New River (Task Force) (see member list, Attachment 1) is proposing to construct two demonstration research wetlands on separate sites, both located in Southern California near Brawley, that will require federal permits and regulatory approvals from the Bureau of Reclamation (Reclamation), Environmental Protection Agency, and Army Corps of Engineers. Under the National Environmental Policy Act (NEPA) and the Council on Environmental Quality regulations for implementing NEPA, Reclamation's Lower Colorado Regional Office was designated as lead federal agency and the Task Force as the joint lead agency for the proposed wetlands project. The other federal agencies listed above are cooperators along with California Regional Water Quality Control Board, California Fish and Game, Office of US Congressman Hunter, Salton Sea National Wildlife Refuge, Imperial Irrigation District, and Imperial County. As lead federal agency, Reclamation has oversight responsibilities for managing the NEPA process, compliance documentation and agency coordination to be prepared for the proposed project. The Task Force is the applicant and will be funding the proposed project.

The purpose of these wetlands is not to create wildlife habitat but to demonstrate the ability of constructed wetland technology to improve the water quality of the New River. Water sources for the research wetlands include agricultural drain water for the larger 68-acre wetland site and New River water for the smaller 7-acre wetland site. Wetland-processed water leaving both sites will eventually be returned to the New River. Benefits from this wetland research would be the reduction of contaminates flowing down the New River to the Salton Sea. Long term operation of the project could result in creation of wetland wildlife habitat. Elemental selenium appears to be the only major concern at this time and is dealt with in the monitoring and operation plan (see attached monitoring plan, Attachment 2).

The proposed 7-acre site is adjacent to the New River near Brawley, CA. (See conceptual drawings and site maps, Attachment 3) The site is located among active agricultural fields with the closest building located ¼ mile from the proposed site. The design for the constructed wetland encompasses the entire 7 acres and will consist of approximately five wet acres. Water will be pumped out of the New River and onto the site where it will flow through the wetland and then returned to the river. The site is owned by Imperial County and has been cultivated for at least 20 years. Vegetation on the site consists of a perimeter of mostly saltcedar. (Imperial County contact Randy Reister 760-339- 4384).

The second site is located on 68 acres adjacent to the New River near Imperial, CA. (see Attach. 3) This site is also located adjacent to active agricultural fields and the closest building is ¼ mile from the proposed site. The created demonstration wetland will use the entire 68 acres and will contain approximately 40 wet acres. This wetlands will use agricultural drain water from IID's Rice #3 drain that flows into the New River. After flowing through the wetland, the water will be returned to the New River. Scrub vegetation (salt cedar) on the site has been bladed on a regular basis but the site has never been cultivated. The site is located between a 70-foot high bluff, the Rice #3 agricultural drain and the New River. The property is owned by IID (IID contact Paul Peschel at 760-339-9256).

To facilitate compliance with the requirements of Section 7 of the ESA, Reclamation requested a list of threatened and endangered species (List) from the Service for the proposed project area by memorandum dated July 21, 1998. This List (Species List File No. 1-6-98-SP-037, see Attachment 4) was provided to Reclamation by memorandum dated September 8, 1998. The List identified the following Federally listed and proposed threatened and endangered species: (1)Peirson's milkvetch - endangered; (2) Desert pupfish - endangered; (3) Brown pelican - endangered; (4) American peregrine falcon - endangered; (5) Southwestern willow flycatcher - endangered; (6) Aleutian Canada goose- threatened; and (7) Yuma clapper rail - threatened. In addition to federally -listed and -proposed threatened and endangered species, the Service identified species that are sensitive and candidates for listing pursuant to the ESA.

Since receipt of the List, Task Force has continued the planning and evaluation process of the proposed project to refine the operational and monitoring plan. At this time an agency preferred alternative has been selected. The Biological Assessment (BA) prepared for this proposed project analyzes effects of project alternatives on Federally listed and proposed species within the project area. The seven listed species are addressed in the BA and it states that there were no endangered or threatened species on, or adjacent to, either site nor is any suitable habitat available on site to support the listed species. Reclamation wildlife biologists, Barbara Raulston (avifauna) and Glen Gould (fisheries), were consulted about site specific habitat and species information. Ms. Raulston visited the sites in May of 1998, for the 7-acre site, and in October of that year, for the 68-acre site, and found no evidence of T&E species on either site. Based on her findings and

Mr. Gould's expertise and knowledge of the area, both concluded that the proposed project could be beneficial to the wildlife in the area. Ms. Raulston's and Mr. Gould's observations are included as Attachment 5, Biological Assessment - Brawley Wetlands Project.

Conversations with representatives on the project Task Force point to concerns that an immediate response might be needed in the event of an imminent threat to a listed species. A threat to a listed species, such as avian botulism, could require a cell or an entire site to be drained and harvested on short notice to prevent the spread of the problem. The central concern was that immediate action toward alleviation of the threat could be hampered because it could involve removal of constructed listed-species habitat. Again, it is not the intent of this study to create habitat. The project's Cooperative Agreement clearly states (para. 6.3) that if the project is determined to adversely affect a listed species, immediate action will be taken, up to and including complete shut-down of the project and remediation of the project site back to its pre-construction condition.

Reclamation participated in the preparation and review of the BA. Based on the biological field analyses and perceived effects of the proposed project on listed species, Reclamation makes the following determinations of affect for the purposes of compliance with Section 7(c) of the ESA, as amended:

1. **No Effect -** Species and/or Critical Habitat

   Endangered American peregrine falcon

   Endangered Peirson's milkvetch

   Threatened Aleutian Canada goose

   Endangered Desert pupfish

   Endangered California brown pelican

2. **Not Likely to Adversely Affect -** Species and/or Critical Habitat

   Endangered Southwestern willow flycatcher and Threatened Yuma clapper rail. Effects for both species are expected to be beneficial, discountable or insignificant. The project will not result in a take of either species and no designated critical habitat will be affected.

The direct lack of listed species or suitable habitat on either site and the potentially beneficial indirect effects of the project, result in a determination of "not likely to adversely affect" for the listed species. Reclamation requests the Service's concurrence in writing with the findings of the BA and our determinations of affect within 30 days of receipt of this memorandum.

If you have any questions, please contact Mr. Henri J Kaplan at 702 293-8060.

List of attachments:

1. Citizens Congressional Task Force on the New River, member and agency list
2. Brawley wetlands proposed Monitoring Plan
3. Site maps (locations marked)
4. Conceptual drawings
5. FWS species list
6. Biological Assessment - Brawley Wetlands Project

cc: Citizens Congressional Task Force on the New River

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Field Office
2730 Loker Avenue West
Carlsbad, California 92008

Memorandum

To: Thomas Shrader, Manager, Environmental Compliance and Realty Group, Bureau of Reclamation, Lower Colorado Regional Office, Boulder City, Nevada.
Reply Reference: LC-2501, ENV-7.00

Attn: Mr. Hank Kaplan, Environmental Protection Specialist

From: Field Supervisor

Subject: Request for List of Endangered, Threatened, Proposed, and Candidate Species for the Proposed Brawley Wetlands Study, Imperial County, CA. (1-6-98-SP-037)

This memorandum is in response to your request dated July 21, 1998, and received by us on July 23, 1998, for information on potential species of concern within the referenced area. Unfortunately, we do not have site specific information for the project area. However, in an effort to assist you in evaluating the potential for conflicts between endangered, threatened, proposed, and candidate species and the proposed project, we are providing the following list of species that occur or may occur in the general area. The enclosed list partially fulfills the requirements of the Fish and Wildlife Service (Service) under section 7 (c) of the Endangered Species Act of 1973, as amended (Act).

Section 7(a)(2) of the Act requires a Federal agency, in consultation with, and with the assistance of the Service, to insure that any action it authorizes, funds, permits, or carries out, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. To meet this requirement, biological assessments are required under section 7 of the Act if listed species or critical habitat may be present in the area affected by any major construction activity[1]. If a biological assessment is not required, your agency still has the responsibility to review its proposed activities and determine whether listed species may be affected. Moreover, "action" means all activities or programs of any kind authorized, funded,

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[1] "Construction Activity" means any Federal action which significantly affects the quality of the human environment designed primarily to result in the building or erection of man-made structures such as dams, buildings, roads, pipelines, channels, and the like. This includes Federal actions such as permits, grants, licenses, or other forms of Federal authorizations or approvals which may result in construction.

permitted, licensed, constructed, or carried out, in whole or in part, by Federal agencies. In addition, "action area" means all areas to be affected directly, indirectly, and/or cumulatively by the Federal action and not only the immediate area involved in the action.

Section 7(d) of the Act prohibits Federal agencies and applicants from making any irreversible or irretrievable commitment of resources which has the effect of foreclosing the formulation or implementation of reasonable and prudent alternatives that would avoid jeopardizing the continued existence of listed species or resulting in the destruction of critical habitat. During the assessment or review process, you may engage in planning efforts, but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act. If a listed species may be adversely affected, agencies should request, in writing through this office, formal consultation pursuant to section 7(a)(2) of the Act. Informal consultation should be used to exchange information and resolve conflicts with respect to listed species prior to a written request for formal consultation.

When it is determined that a proposed action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat, a Federal agency is required to initiate a conference with the Service. Conferences are informal discussions between the Service and the Federal agency, designed to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service makes recommendations, if any, on ways to minimize or avoid adverse effects of the action. The conference process alerts Federal agencies of possible steps that a Federal agency might take at an early stage to modify its actions to avoid jeopardizing a proposed species.

Other sensitive species are included for the purpose of notifying a Federal agency and applicant in advance of possible proposals and listings which at some time in the future may have to be considered during your planning activities. If early evaluation of a project indicates that it is likely to adversely impact other sensitive species, we recommend that the Federal agency seek technical assistance from this office in an effort to avoid or reduce impacts to such species.

Our objective is to provide technical assistance that identifies specific features that could be incorporated into the project description to avoid adverse impacts to listed species. Should you have any questions regarding the species listed or your responsibilities under the Act, please feel free to contact Mark Pavelka, Project Biologist, Branch of Federal Projects, at (760) 431-9440.

Sincerely

Sheryl L. Barrett

Sheryl L. Barrett
Assistant Field Supervisor

List of Endangered, Threatened, Proposed,
and Candidate Species that May Occur in the Study Area for the
Proposed Brawley Wetlands Study
Imperial County, California
September 2, 1998
1-6-98-SP-37

Common Name	**Scientific Name**	**Status**[1]
PLANTS		
Peirson's milkvetch	*Astragalus magdalenae* var. *peirsonii*	E
FISH		
Desert pupfish	*Cyprinodon macularius*	E
BIRDS		
Brown pelican	*Pelecanus occidentalis*	E
Peregrine falcon	*Falco peregrinus*	E
Southwestern willow flycatcher	*Empidonax traillii extimus*	E
Aleutian Canada goose	*Branta canadensis* ssp. *leucopareia*	T
Yuma clapper rail	*Rallus longirostris* ssp. *yumanensis*	T

[1] E: Endangered
T: Threatened

List of Sensitive Species that May Occur in the Study Area for the
Proposed Brawley Wetlands Study
Imperial County, California
September 2, 1998
1-6-98-SP-37

Common Name	**Scientific Name**
PLANTS	
Silvery-leaved sunflower	*Helianthus nivens* ssp. *tephrodes*
Harwood's milkvetch	*Astragalus insularis* var. *harwoodii*
Wiggins' croton	*Croton wigginsii*
Baja California ipomopsis	*Ipomopsis effusa*
Wiggins' Cholla	*Opuntia wigginsii*
Giant Spanish needles	*Palafoxia arida* var. *gigantea*
INVERTEBRATES	
Alkali skipper	*Pseudocopaeodes eunus* ssp. *eunus*
REPTILES	
Colorado desert fringe-toed lizard	*Uma notata* ssp. *notata*
AMPHIBIANS	
Lowland leopard frog	*Rana yavapaiensis*
BIRDS	
Western Burrowing owl	*Atene cunicularia* ssp. *hypugea*
Mountain plover	*Charadrias montanus*
Yellow-breasted chat	*Icteria viren*
California yellow warbler	*Dendroica petechia brewsteri*
Vaux's swift	*Chaetura vauxi*
Tricolored blackbird	*Agelaius tricolor*
Reddish egret	*Egretta rufescens*
California horned lark	*Eremophila alpestris* ssp. *actia*
Western least bittern	*Ixobrychus exilis* ssp. *hesperis*
Loggerhead shrike	*Lanius ludovicianus*
White-faced ibis	*Plegadis chihi*
Black rail	*Laterallus jamaicensis*
Large-billed savannah sparrow	*Passerculus sandwichensis* ssp. *rostratus*
MAMMALS	
Pallid bat	*Antrozous pallidus*
Spotted bat	*Euderma maculatum*
Pacific western big-eared bat	*Corynorhinus townsendii*

List of Sensitive Species that May Occur in the Study Area for the
Proposed Brawley Wetlands Study
Imperial County, California
September 2, 1998
1-6-98-SP-37
(continued)

Common Name	**Scientific Name**
MAMMALS (continued)	
Pocketed free-tailed bat	*Nyctinomops femorosacca*
Big free-tailed bat	*Nyctinomops macrotis*
Greater western mastiff-bat	*Eumops perotis californicus*
California leaf-nosed bat	*Macrotus californicus*
Small-footed myotis bat	*Myotis ciliolabrum*
Little brown bat	*Myotis lucifugus*

New River Task Force Wetlands Project Monitoring Plan

COPY

Estimated Monitoring Costs

Costs shown include monitoring for two wetland locations. The Rice 3 Drain location consists of a settling basin and four ponds in series. The Brawley location consists of a settling basin and two ponds in series. Flow is monitored using data loggers that require weekly downloading of data. A special study of the water column will include weekly monitoring of Selenium, Nitrogen Species, Phosphorus Species, and Dissolved Oxygen in each cell for three months. Prior to, and following the completion of this special study, monitoring of the water column will consist of two sites per location which include the settling basin influent and final cell effluent.

EQUIPMENT

Flow	(4 sites)($2,000/meter) + $1,000/HP Palmtop	**$ 9,000**
Field Meas.	$850/D.O. + $200/pH + $500/Cond	**$ 1,550**
	Total Equipment Costs	**$10,550**

LAB ANALYSIS (Annually)

Major Ion Chemistry	(4 sites)(2/yr)($200)	**$ 1,600**
Nitrogen (nitrate, nitrite, ammonia, Kjeldahl)	(4 sites)(26/yr)($39) + (2 sites)(4/yr)($39) + (22 sediment sites)(2/yr)($54)	**$ 6,744**
Phosphorus (orthophosphate, total phos)	(4 sites)(26/yr)($52)	**$ 5,408**
D.O.C.	(4 sites)(12/yr)($40) + (2 sites)(4/yr)($40) + (22 sediment sites)(2/yr)($55)	**$ 4,660**
Selenium	(4 sites)(52/yr)($35) + (2 sites)(4/yr)($35) + (84 sediment sites)(2/yr)($50)	**$15,960**
Suspended Solids	(4 sites)(260/yr)($8)	**$ 8,320**
Fecal Coliform	(4 sites)(4/yr)($45)	**$ 720**
% fines < 62 µm	(22 sediment sites)(2/yr)($15)	**$ 660**
Shipping		**$ 2,000**
20% quality assurance		**$ 9,214**
	Total Annual Lab Analysis Costs	**$ 55,286**

LABOR (Annually)

SUSPENDED SOLIDS - Student @ $8/hr, 4hr/day, 260days/wk (4 sites, daily)		$ 8,320
WATER - Sampler @ $15/hr, 5hr/wk		$ 3,900
Flow Data	(4 sites, 26/yr)	
Field Meas.	(4 sites, 52/yr) + (2 sites, 4/yr)	
M.I.C.	(4 sites, 2/yr)	
Nitrogen	(4 sites, 26/yr) + (2 sites, 4/yr)	
Phosphorus	(4 sites, 26/yr)	
D.O.C.	(4 sites, 12/yr) + (2 sites, 4/yr)	
Selenium	(4 sites, 52/yr) + (2 sites, 4/yr)	
Fecal Coliform	(4 sites, 4/yr)	
SEDIMENTS - 2 Biologists @ $500/day, 2 days, 2/yr		$ 4,000
Nitrogen	(22 sites, 2/yr)	
D.O.C.	(22 sites, 2/yr)	
Selenium	(22 sites, 2/yr)	
% fines	(22 sites, 2/yr)	
INVERTEBRATES - 2 Biologists @ $500/day, 4 days, 2/yr		$ 8,000
Selenium	(22 sites, 2/yr)	
BIOTA - 2 Biologists @ $500/day, 2 days, 2/yr		$ 4,000
Selenium	(10 sites, 2/yr)	
PLANTS - 2 Biologists @ $500/day, 2 days, 2/yr		$ 4,000
Selenium	(30 sites, 2/yr)	
Total Annual Labor Costs		**$32,220**

SPECIAL STUDIES

Wildlife Surveys
(2 Biologists)(2 locations)(5 days/season)(4 seasons)($500/day) +
(25% analyze & report) **$50,000**

Disease Monitoring
Required only if dead birds are found

Pesticide Analysis
(2 locations)(2 sites)(2/yr)($600) **$ 4,800**

Time of Travel
(3 people)(10 days)($300/day) **$ 9,000**

Bioaccumulators
(2 locations)[(5 eggs)($35) + (1 composite)(2 sites)($150)] +
(1 Biologist @ $500/day)(2 days) **$ 1,950**

Water Column
(16 sites)(12 sample dates)($35 + $39 + $52) +
Sampler @ $15/hr, 1 day, 12 sample dates **$25,632**

TOTAL **$91,382**

3-YR PROJECT COST SUMMARY

Equipment	**$ 10,550**
Lab Analysis	**$165,858**
Labor	**$ 96,660**
Special Studies	**$ 91,382**
Total Proposed 3-yr Monitoring Plan Costs	**$364,450**

Peter M. Rooney
Secretary for Environmental Protection

California Regional Water Quality Control Board
Colorado River Basin Region

73-720 Fred Waring Drive, Suite 100, Palm Desert, California 92260
Phone (760) 346-7491 • FAX (760) 341-6820

Pete Wilson
Governor

November 12, 1998

Mr. Thomas Shrader, Manager
Environmental Compliance and Realty Group
United States Department of the Interior
Bureau of Reclamation
Boulder City, NV 89006-1470

11/24 JH 2500

2001
1400

RE: PROPOSED BRAWLEY WETLANDS DEMONSTRATION PROJECT – NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

This letter follows up on the November 5, 1998, teleconference meeting that Jose L. Angel of our staff had with Steve Muth of your staff and Leon Lesicka of Desert Wildlife Unlimited, Inc. (DWLUI), regarding the subject matter and your letter of August 21, 1998. Your letter requests our assistance in obtaining the necessary NPDES permits for the aforementioned project.

PROJECT DESCRIPTION

The Bureau of Reclamation proposes to assist DWLUI, Imperial County, and Imperial Irrigation District (IID) to construct a 7-acre and a 68-acre wetlands to improve agricultural drain and New River water quality. The proposed 7-acre wetland is about 1.5 miles southwest of Brawley, along the east bank of the New River, just northwest of the intersection of the Central Main Canal and Rockwood Road, in Section 6, T13S, R13E, SBB&M. The proposed 68-acre wetland is about 2.5 miles northwest from Imperial, in Section 5, T14S, R12E, SBB&M. Both wetland sites are owned by IID. The proposed project will be owned by the Bureau of Reclamation and operated by the Bureau of Reclamation, IID, DWLUI, and Imperial County. The Bureau of Reclamation proposes to discharge treated water from both wetlands into the New River.

You proposal includes a three-year comprehensive monitoring program for both wetlands. The program includes monitoring of the influent and effluent from the wetlands for flow, major ions, nitrogen, phosphorous, dissolved oxygen, selenium, and suspended solids, fecal coliform, and pesticides; monitoring of biota and plants for selenium; and monitoring of bird eggs for bioaccumulation of constituents of concern. Your monitoring program has been developed in consultation with staff from the United States Fish and Wildlife Service, United States Geological Survey, California Department of Fish and Game, University of California-Riverside, and Imperial County among others.

NPDES PERMIT/ WASTE DISCHARGE REQUIREMENTS

The Federal Water Pollution Control Act (a.k.a. Clean Water Act) requires that NPDES permits contain criteria to ensure that discharges of pollutants into waters of the United States do not violate the water quality standards established for the waters. The standards establish water quality goals by designating beneficial use(s) for a specific water body and serve as the regulatory basis for the establishment of water-quality-based effluent limitations and controls (40CFR131.2). The State of California has been delegated authority by the United States Environmental Protection Agency (USEPA) to implement the NPDES program throughout the state.

Title II of the recently enacted federal legislation entitled the "Salton Sea Reclamation Act of 1998" authorizes the Bureau of Reclamation, acting on behalf of the U.S. Secretary of the Interior, to construct the subject wetlands for research purposes. Further, our review of the subject legislation indicates that Title II exempts the Bureau of Reclamation from having to comply with the water quality standards of the Clean Water Act for the project, provided the water from the wetlands is discharged into either the Alamo or the New Rivers. Because Congress has provided the Bureau of Reclamation with the exemption, and in consultation with the USEPA, we have determined that **waste discharge requirements for this project are not necessary.**

Please keep us informed on the status of the project on a periodic basis (e.g., monthly updates) and send us copies of the monitoring results as they become available.

If you have any questions about this matter, please call Jose L. Angel at (760) 776-8932.

PHIL GRUENBERG
Executive Officer

JLA/jr

cc: Ms. Alexis Strauss, United State Environmental Protection Agency, Region IX, San Francisco
Ms. Eugenia McNaughton, United State Environmental Protection Agency, San Francisco
Mr. Bill Steele, United States Department of the Interior, Bureau of Reclamation, Boulder
Mr. Steve Muth, United States Department of the Interior, Bureau of Reclamation, Boulder
Mr. Jim Setmire, United States Department of the Interior, Bureau of Reclamation, Temecula
Mr. Terry Dean, United States Army Corps of Engineers, San Diego
Mr. Bart Christensen, State Water Resources Control Board, CWP, Sacramento
Mr. Tom Wolfe, Imperial County Environmental Health Department, El Centro
Ms. Marie Barrett, Imperial Valley College, Imperial
Mr. Tom Kirk, Salton Sea Authority, Indio
Ms. Jeanie Snyder, Imperial Irrigation District, Imperial
Mr. Leon Lesicka, DWLUI, Brawley

Attachment 4

NPDES Correspondence
w/Monitoring and Operation Plan

United States Department of the Interior

BUREAU OF RECLAMATION
Lower Colorado Regional Office
P.O. Box 61470
Boulder City, NV 89006-1470

IN REPLY REFER TO
LC-2501
ENV-7.00

AUG 21 1998

Mr. Phil Gruenberg
Executive Officer
California Regional Water Quality
Control Board
California Environmental Protection
Agency
73-720 Waring Drive, Suite 1000
Palm Desert CA 92260

Subject: Request for National Pollution Discharge Elimination System Permit for Proposed Brawley Wetlands Demonstration Project

Dear Mr. Gruenberg:

The Bureau of Reclamation (Reclamation) is proposing to assist the Citizen's Task Force on the New River to investigate the application of constructed wetland techniques on the New River in Southern California. The task force consists of representatives from Federal, state and local agencies, and local environmental and private groups. California EPA is represented (on the Task Force) by yourself and Mr. Jose Angel of your staff. The investigation involves construction of a demonstratoin wetland project at two locations just south of Brawley, California (see attached figures and drawings).

Two proposed research wetlands are to be constructed. The purpose of these projects is to demonstrate the ability of a wetland to improve water quality. A copy of the monitoring plan is also attached. The larger wetland's water source will be agricultural drain water while the smaller site will use New River water. Treated water leaving both wetlands will be returned to the New River and flow into the Salton Sea. Benefits from these wetlands are expected to be the improved water quality, creation of wetland wildlife habitat, and reduction of contaminates to the Salton Sea. Elemental Selenium appears to be the only major concern from wildlife agencies that are involved in the task force and wildlife agency representatives at both state and Federal levels are supportive of this project.

Since the State of California has been authorized by the EPA Administrator to issue NPDES permits, Reclamation requests your assistance in obtaining the necessary permits for the proposed action.

If you have any questions, please contact Environmental Protection Specialist Hank Kaplan at 702-293-8060.

Sincerely,

THOMAS H. SHRADER

Thomas Shrader, Manager
Environmental Compliance and Realty Group

Attachments

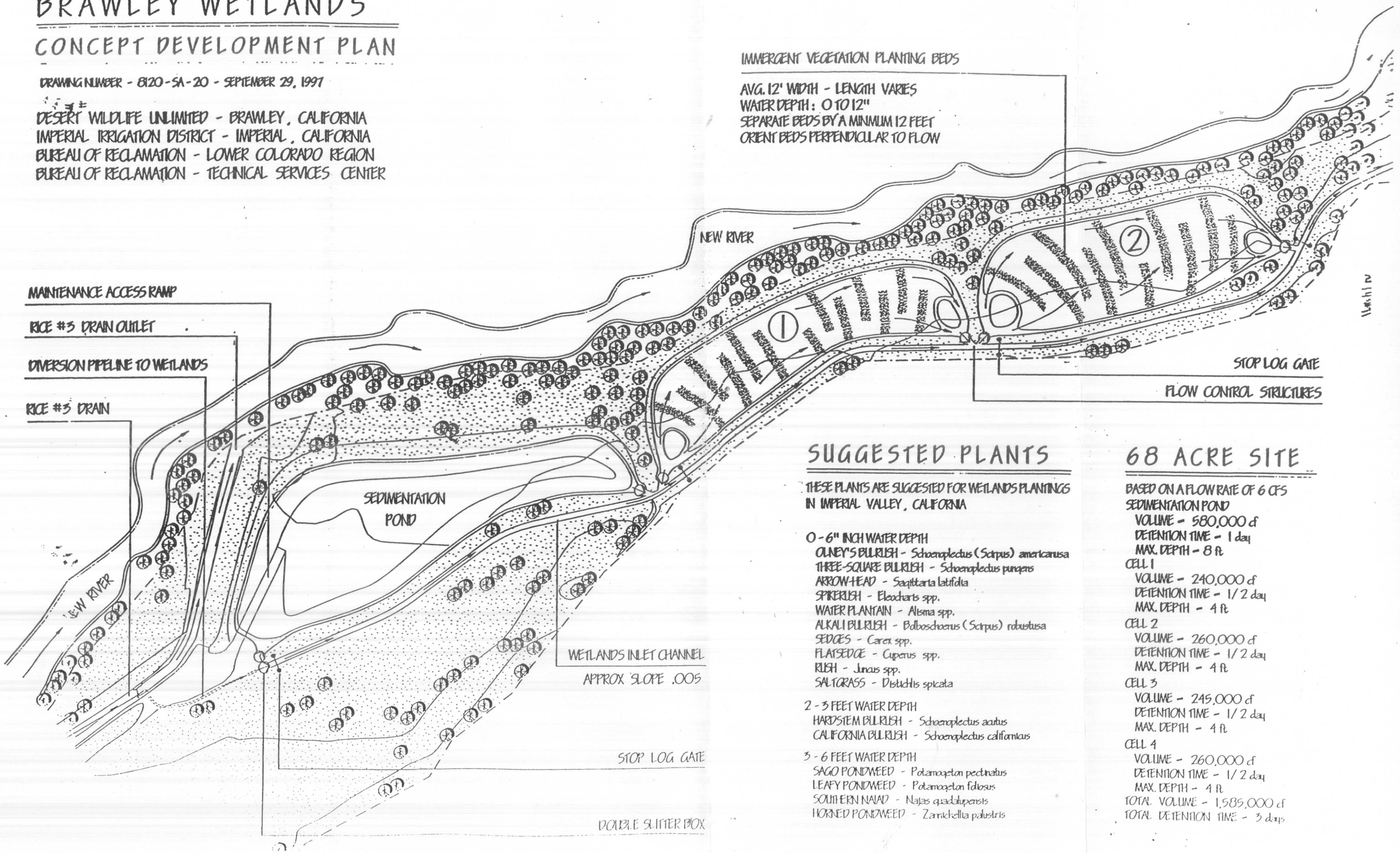
2001
Daily
WBR:HKaplan:lb:8/6/98:293-88060
(COM2200:CANPDES.HK)

BRAWLEY WETLANDS

CONCEPT DEVELOPMENT PLAN

DRAWING NUMBER - 8120-SA-20 - SEPTEMBER 29, 1997

DESERT WILDLIFE UNLIMITED - BRAWLEY, CALIFORNIA
IMPERIAL IRRIGATION DISTRICT - IMPERIAL, CALIFORNIA
BUREAU OF RECLAMATION - LOWER COLORADO REGION
BUREAU OF RECLAMATION - TECHNICAL SERVICES CENTER



SUGGESTED PLANTS

THESE PLANTS ARE SUGGESTED FOR WETLANDS PLANTINGS IN IMPERIAL VALLEY, CALIFORNIA

0 - 6" INCH WATER DEPTH
- OLNEY'S BULRUSH - Schoenoplectus (Scirpus) americanusa
- THREE-SQUARE BULRUSH - Schoenoplectus pungens
- ARROW-HEAD - Sagittaria latifolia
- SPIKERUSH - Eleocharis spp.
- WATER PLANTAIN - Alisma spp.
- ALKALI BULRUSH - Bolboschoenus (Scirpus) robustusa
- SEDGES - Carex spp.
- FLATSEDGE - Cyperus spp.
- RUSH - Juncus spp.
- SALTGRASS - Distichlis spicata

2 - 3 FEET WATER DEPTH
- HARDSTEM BULRUSH - Schoenoplectus acutus
- CALIFORNIA BULRUSH - Schoenoplectus californicus

3 - 6 FEET WATER DEPTH
- SAGO PONDWEED - Potamogeton pectinatus
- LEAFY PONDWEED - Potamogeton foliosus
- SOUTHERN NAIAD - Najas guadalupensis
- HORNED PONDWEED - Zannichellia palustris

68 ACRE SITE

BASED ON A FLOW RATE OF 6 CFS
SEDIMENTATION POND
- VOLUME - 580,000 cf
- DETENTION TIME - 1 day
- MAX. DEPTH - 8 ft

CELL 1
- VOLUME - 240,000 cf
- DETENTION TIME - 1/2 day
- MAX. DEPTH - 4 ft

CELL 2
- VOLUME - 260,000 cf
- DETENTION TIME - 1/2 day
- MAX. DEPTH - 4 ft

CELL 3
- VOLUME - 245,000 cf
- DETENTION TIME - 1/2 day
- MAX. DEPTH - 4 ft

CELL 4
- VOLUME - 260,000 cf
- DETENTION TIME - 1/2 day
- MAX. DEPTH - 4 ft

TOTAL VOLUME - 1,585,000 cf
TOTAL DETENTION TIME - 3 days

BRAWLEY WETLANDS

CONCEPT DEVELOPMENT PLAN

DRAWING NUMBER - 8120 - SA - 21 - SEPTEMBER 29, 1997

DESERT WILDLIFE UNLIMITED BRAWLEY, CALIFORNIA
IMPERIAL IRRIGATION DISTRICT - IMPERIAL, CALIFORNIA
BUREAU OF RECLAMATION - LOWER COLORADO REGION
BUREAU OF RECLAMATION - TECHNICAL SERVICES CENTER

NORTH

0 100 200 300 400 500
SCALE IN FEET FOR BOTH SITES

WILDLIFE SEED CROPS
4 ACRES

NEW RIVER

TOE OF EMBANKMENT

NEW RIVER

ISLAND HABITAT

1/4 ACRE @ EACH CELL INLET & OUTLET. ISLAND SIDE SLOPES 2:1. PROTECT SLOPES WITH ROCK COVER.

WETLANDS INLET CHANNEL
APPROX. SLOPE .005

Match Line

68 ACRE SITE

7 ACRE SITE

BASED ON A FLOW RATE OF 1 CFS

CELL 1
VOLUME - 130,000 cf
DETENTION TIME - 1-1/2 days
MAX. DEPTH - 4 ft

CELL 2
VOLUME - 96,000 cf
DETENTION TIME - 1 day
MAX. DEPTH - 4 ft

CELL 3
VOLUME - 102,000 cf
DETENTION TIME - 1-1/4 days
MAX. DEPTH - 4 ft

TOTAL VOLUME - 328,000 cf
TOTAL DETENTION TIME - 3-3/4 days

BYPASS DRAIN

EXISTING PUMP & SUMP

NEW RIVER

WILDLIFE SEED CROPS
3/4 ACRE

MANSFIELD PIPELINE

7 ACRE SITE

United States Department of the Interior

BUREAU OF RECLAMATION
Lower Colorado Regional Office
P.O. Box 61470
Boulder City, NV 89006-1470

IN REPLY REFER TO:
LC-2501
ENV-7.00

JUL 21 1998

MEMORANDUM

To: Mr. John Hanlon, Chief, Branch of Federal Projects, U.S. Fish and Wildlife Service, 2730 Loker Avenue West, Carlsbad CA 92008

From: Thomas Shrader, Manager
Environmental Compliance and Realty Group

Subject: Request for Threatened and Endangered Species List on Proposed Brawley Wetlands Study

Reclamation is proposing to assist the Citizen's Task Force on the New River in investigating the application of constructed wetland techniques on the New River in Southern California. The task force consists of representatives from Federal, state and local agencies, and local environmental and private groups. Fish and Wildlife Service is represented on the task force by Carol Roberts from the Carlsbad office. The investigation involves construction of a demonstrating wetland project at two locations just south of Brawley, California.

The two proposed research wetlands are to be constructed on two separate sites (see attached figures and drawings). The purpose of these projects is to demonstrate the ability of a wetlands to improve water quality. The larger wetland's water source will be agricultural drain water while the smaller site will use New River water. Treated water leaving both wetlands will be returned to the New River and flow into the Salton Sea. Benefits from these wetlands are expected to be the improved water quality, creation of wetland wildlife habitat, and reduction of contaminates to the Salton Sea. Elemental Selenium appears to be the only major concern from wildlife agencies that are involved in the task force, however, wildlife agency representatives at both state and federal levels are supportive of this project.

As required under Section 7(a) of the Endangered Species Act of 1973, as amended, Reclamation is requesting a list of potential Threatened and Endangered Species that might be affected by the proposed action.

If you have any questions, please contact Environmental Protection Specialist Hank Kaplan at 702-293-8060.

THOMAS H. SHRADER

Attachments

2001
Daily
WBR:HKaplan:lb:7/16/98:293-8060
(COM2200:FWSLIST.HK)

Brawley, CA Wetlands Projects [1]

- Steve Muth, Project Leader, LCR

Overview:

Two proposed research wetlands are to be constructed on two sites located in Southern California, near Brawley, CA. The purpose of these project is to demonstrate the ability of a wetlands to improve water quality. The larger wetland's water source will be agricultural drain water while the smaller site will use New River water. Treated water leaving both wetlands will be returned to the New River and flow into the Salton Sea. Benefits from these wetlands would be creation of wetland wildlife habitat and reduced contaminates to the Salton Sea. Elemental Selenium contamination appears to be the only major concern from the wildlife agencies at this time, however, wildlife agencies at both state and federal levels are supportive of this project.

Project Status:

Construction designs (see attached concept drawings) are being finalized by the Bureau of Reclamation (BOR) for review by the Citizens Congressional for the New River (CCTFNR). CCTFNR is also a project sponsor. Design of the proposed water quality/wildlife monitoring plan is not yet developed.

An agreement was signed (4/98) by Imperial Irrigation District (IID), Desert Wildlife Unlimited (DWU) and BOR. BOR is responsible for design, permitting, construction, maintenance and monitoring of two demonstration wetlands.

Authorization:

BOR is authorized to conduct studies and enter into agreements with non-Federal entities pursuant to the Act of Congress approved June 17, 1902 (32 Stat. 388), and acts amendatory thereof and supplementary thereto, all of which acts are commonly known and referred to as Reclamation Law and the Act of March 4, 1921, referred to as the Contributed Funds Act. Also the Desalination Act of 1996 generally provides for research and studies to determine cost effective and technologically efficient means to produce usable water from saline water or water otherwise impaired or contaminated.

Project Description:

One proposed site is located on a 7 acre parcel adjacent to the New River near Brawley, CA. (See attached map.) The site is located among active agricultural fields with the closest building

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[1] C:\MYDOCU~1\BRAWLEY\404PRMIT.PKG

located ¼ mile from the proposed site. The design for the created wetlands encompasses the entire 7 acres and will consist of approximately 5 wet acres. New River water will be pumped out of the river into this site for treatment and then returned to the river. The site is owned by Imperial County and has been cultivated for at least 20 years. Vegetation on the site consists of a perimeter of mostly saltcedar. (Imperial County contact Randy Reister 760 339 4384).

The second site is located on 68 acres adjacent to the New River near Imperial, CA. (See attached map.) This site is also located adjacent to active agricultural fields and the closest building is located ¼ mile from the proposed site. The created wetland will use the entire 68 acres and will contain approximately 40 wet acres. This wetlands will use agricultural drain water from IID's Rice #3 drain that flows into the New River. After flowing through the wetland, the water will be returned to the New River. Vegetation on the site has been maintained but the site has never been cultivated. The site is located between a 70 foot high bluff, the Rice #3 agricultural drain and the New River. The property is owned by IID (IID contact Paul Peschel 760339 9256).

Alternatives

Location

Currently there are two preferred locations for the project, a 68 acre site owned by IID and a 7 acre site owned by Imperial County. The agencies are both involved in the study and have donated the land for use as a demonstration wetland. Of all the locations discussed, the two proposed sites have the necessary qualities for the pilot project - easy access to New River water , agriculture drain water, and existing support roads, with minimal archeological impact or environmental/legal entanglements, and zero acquisition cost. Also, because of their location adjacent to the river (see attached maps) these two sites are the best available based on the criteria discussed below.

Alternate locations are limited to surrounding agricultural land being worked in the area. An alternative site for the proposed 68 acre sight is located on the over-looking bluff to the south. Approximately 70 acres of production farmland would be needed for the project. Although it would be located above the flood plain, acquisition of the land was abandoned when the IID parcel became available because of the prohibitive development and operation costs, and poor access to source water. Most of the development costs would be in acquiring the land and pipeline right-of -way from the private owners and building the additional piping and pumps to get the source water to the wetland. Increases in operation costs would be for lifting the water and maintenance of a much more complicated system.

An alternative for locating the smaller wetland outside of the flood plain is on a bluff southeast of the proposed Imperial County owned site. This site suffers from the same ills as the alternative for the larger wetland - poor access to source water and much higher development/operating costs.

Size and Design

The current size of the wetland and the cells were in large part dictated by the parcels of land being used. Although the configuration of the project could be modified to have fewer cells or to use less of the land available it would severely compromise the project's effectiveness in demonstrating application of constructed wetland technology to improve New River water.

Attachment 6

Section 106 Correspondence
(National Historic Preservation Act)

United States Department of the Interior

BUREAU OF RECLAMATION
Lower Colorado Regional Office
P.O. Box 61470
Boulder City, NV 89006-1470

IN REPLY REFER TO:
LC-2517
ENV-3.00

SEP 29 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Cherilyn Widell
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
PO Box 942896
Sacramento CA 94296-0001

Subject: Brawley Research Wetlands Project, Imperial County, California

Dear Ms. Widell:

Reclamation's Lower Colorado Regional Office, in partnership with Imperial County, the Imperial Irrigation District (IID), Desert Wildlife Unlimited, and the Citizens Congressional for the New River, proposes to construct two research wetlands, totaling approximately 75 acres in size, adjacent to the New River near Brawley, California. The purpose of this project would be to demonstrate the ability of wetlands to improve the water quality of the New River and create wildlife habitat. Reclamation will provide technical assistance to this project, thus making it a Federal undertaking, as defined by the National Historic Preservation Act (NHPA), as amended. As a Federal undertaking, this project triggers the requirements of Section 106 of the NHPA to identify, record, evaluate, and treat any historic properties within the Area of Potential Effect (APE).

Project Description and Location

Two locations adjacent to the New River were identified for construction of research wetlands. The smaller of these proposed project areas is a roughly triangular 7 acre parcel, situated adjacent to the New River, approximately 3 miles southwest of Brawley (T.14S, R.14E Section; Brawley, California, USGS 7.5 Quad). Owned by Imperial County, the majority of this parcel has been leveled and under cultivation for approximately 20 years. Irrigation water from the New River is provided to the field by an existing pump, sump, and pipeline system. Five of the 7 acre cultivated field would be used for the research wetland. An interconnected series of four shallow ponds (1/4 acre each, total 1 acre) would be excavated to an average depth of 3 to 4 feet, with a maximum depth of 8 feet. The ponds would be surrounded by 4 acres of wildlife seed crops and native trees. Water from the New River would enter and exit the research wetlands by way of the existing irrigation system.

The second project area, owned by IID and known as the Rice 3 Drain, is a 68 acre parcel adjacent to the New River, approximately 10 miles southwest of Brawley (T.14 S, R. 13E, Section 33, portions of SE & SW1/4 of SW1/4; T.15S, R.13E, NW1/4 Section 4; portions of NE1/4, SE1/4 & SW1/4 Section 5; Brawley NW, California, USGS 7.5 Quad). Three interconnected ponds would be excavated, to a maximum depth of 8 feet and an average depth of 4 feet. A total of 40 acres would be under water, with plantings of native wetlands vegetation surrounding the sedimentation ponds. Water from the New River would enter the ponds by way of a pipeline from the existing Rice 3 Drain.

This parcel has also been extensively disturbed by prior mechanical vegetation removal, road grading, agricultural leveling, recreational uses (e.g., off highway vehicles, hunting, target shooting), and unauthorized dumping. Spoil dirt piles from very recent dredging of the New River were observed at several locations along the river frontage. An estimated 80 percent of the total 68 acre project area has been impacted to varying degrees by prior surface disturbance.

Cultural Resources Assessment

In order to satisfy its responsibilities under Section 106, Reclamation completed a cultural resource assessment of the two proposed wetlands project areas (see enclosed CR Report LC-CA-98-6). The APE for each area was defined as that acreage that would be directly or indirectly impacted by wetlands construction-related activities: 7 acres could be disturbed at Project Area #1; 68 acres at Project Area #2. The assessment was conducted in two phases, with the following results.

A review of records and relevant literature was completed by the Southwest Information Center, Imperial Valley College Desert Museum, Ocotillo, California. No designated landmarks were shown to occur within or near the APEs for this undertaking. No Traditional Cultural Properties, sacred sites, or sensitive areas for Native American tribes have been identified within or near the APEe for this project.

Intensive field investigations were conducted by a Reclamation archeologist at each proposed wetland area, but no resources of either prehistoric or historic significance were identified. All cultural manifestations observed were of recent origin and included several loci of modern trash. None of these modern trash scatters yet meet the 50 year age criteria nor satisfy any of the National Register eligibility criteria.

Assessment of Effects

Based on the findings of the cultural resource assessment for the proposed Brawley Wetlands Research Project, Reclamation has determined that no historic properties occur within the APE or would be affected by this proposal. While the likelihood for discoveries of buried properties is minimal, Reclamation will require that an archeological monitor be present during construction activities at the two proposed project areas.

Your concurrence with this determination of "No Properties-No Effect" is requested through Section 106 consultation. At this time, Reclamation wishes to conclude Section 106 consultation per 36 CFR 800.4 (d). Should you have any questions concerning this project, kindly contact Dawna Ferris, Reclamation Archeologist, at 702-293-8707.

Sincerely,

JAMES GREEN

FOR Thomas Shrader, Manager
Environmental Compliance and Realty Group

Enclosure

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(COM2200:BRASHOP.DF)

STATE OF CALIFORNIA - THE RESOURCES AGENCY

PETE WILSON, Governor

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624
FAX (916) 653-9824

NOV 9 1998

November 3, 1998

REPLY TO: BUR981002A

11/12 2001

Michael T. Walker, Manager, Env. Comp.
Lower Colorado Regional Office
Bureau of Reclamation
P.O. Box 61470
BOULDER CITY NV 89006-1470

Project: **Brawley Research Wetlands, Imperial County**

Dear Mr. Walker:

Thank you for requesting my views on the cited undertaking. Based on staff review of the documentation you submitted, I would like to offer the following comments on the actions you have taken to comply with Section 106 of the National Historic Preservation Act.

The reports indicate that reasonable measures were taken to identify historic properties within the project's APE. Your efforts to identify historic properties conform to applicable standards. No historic properties were identified within the APE of your undertaking.

Based on the foregoing finding, I have no objection to your determination that this undertaking will not affect historic properties as it is currently designed. Your agency may have additional Section 106 responsibilities under certain circumstances set forth in 36 CFR 800.

Your consideration of historic properties in the project planning process is appreciated. If you have any questions regarding our review of this undertaking, please call Gary Reinoehl of my staff at (916) 653-5099.

Sincerely,

Daniel Abeyta
Acting State Historic Preservation Officer

Attachment 7

Public Involvement

facsimile
TRANSMITTAL

to: Shawn Carroll, Joan Bell
fax #: 760-356-~~4715~~, 760-337-3405
re: Public Notice of Draft Environmental Assessment
date: 11/01/99
pages: 2, including this cover sheet.

I am schedulded to be in Denver tommorow. Please call me back with your quote by 2:00 pm today. Payment will be by Visa credit card at that time.

HK

From the desk of...

Henri J. Kaplan
HazWaste Coordinator LC Region
U.S. Bureau of Reclamation
400 Railroad Ave, P.O. Box 61470
Boulder City, NV 89006-1470

702-293-8060
Fax: 702-293-~~8145~~
8023

NOTICE OF AVAILABILITY
DRAFT ENVIRONMENTAL ASSESSMENT
for the
BRAWLEY CONSTRUCTED WETLANDS DEMONSTRATION PROJECT

NOTICE IS HEREBY GIVEN that the Bureau of Reclamation (Reclamation), Lower Colorado Region Office, has issued a Draft Environmental Assessment (EA) for the construction and operation of two demonstration wetlands on the New River, south of Brawley, California. A 30-day public review process will begin November 3, 1999. Reclamation will accept written comments at the address below. Comments must be received by Friday, December 3, 1999.

SUMMARY: The Citizens Congressional Task Force on the New River (Task Force) is proposing to construct two demonstration wetlands on separate sites, both located in the Imperial Valley of Southern California. This project will demonstrate the effectiveness of using constructed wetlands to improve water quality in the Imperial Valley, specifically on the New River. Water sources for the demonstration wetlands include agricultural drain water for the Rice 3 Drain wetland site and New River water for the smaller Brawley wetland site. Wetland-processed water leaving both sites will eventually be returned to the New River. The data on the effects of the wetland would be collected for a period of three years. Reclamation is a project proponent within the Task Force. As lead federal agency, Reclamation has oversight responsibilities for managing the NEPA process, compliance documentation and agency coordination to be prepared for the proposed project. The Task Force is the applicant and will be funding the proposed project. Reclamation is participating in accordance with P.L. 105-372.

The Draft EA analyzes two alternatives: the Proposed Action and the No Action Alternative. The Environmental Assessment for the Brawley Constructed Wetlands Demonstration Project is available for public review at the following locations:

Bureau of Reclamation, Lower Colorado Region Office
Attn: Hank Kaplan (LC-2501)
Mead Building
P.O. Box 61470
Boulder City, NV 89006-1470

El Centro Public Library Reference Desk
539 State Street
El Centra, CA 92244

Brawley Public Library Reference Desk
400 Main Street
Brawley CA 92227

A copy of the Environmental Assessment, without appendices, is also available on-line at *www.lc.usbr.gov.*

CONTACT: Hank Kaplan (LC-2501), Environmental Compliance Group, Bureau of Reclamation, P.O. Box 61470, Boulder City, NV 89006-1470. Telephone: (702) 293-8060. E-mail: *hkaplan@lc.usbr.gov*.

Affidavit of Publication

State of California
County of Imperial
City of Imperial

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2251P Nov. 4, 11, 18, 25, Dec. 2, 1999

BRENDA TORRES

being first duly sworn, deposes and says:

That he/she is a citizen of the United States, over twenty-one years of age; that he/she is and was, at all times herein mentioned, the business manager of the Imperial Valley Weekly/Imperial Hometown Review, a newspaper of general circulation published and circulated at least once a week in the City of Holtville, Imperial County, State of California.

And that the

Public Notice

Notice of Availability

of which the annexed is a true printed copy, was published in said newspaper for

4

issues, and on the following days, to wit:

November 4, 11, 18, 25, 1999

December 2, 1999

and in the regular and entire issue of said newpaper, and not in any supplement.

BUSINESS MANAGER

IMPERIAL VALLEY WEEKLY
IMPERIAL HOMETOWN REVIEW
523 PINE AVENUE
HOTLVILLE, CALIFORNIA

PROOF OF PUBLICATION

(2015.5 C.C.P.)

This space is for County Clerk's Filing Stamp

STATE OF CALIFORNIA

County of Imperial

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk* of the printer of the

IMPERIAL VALLEY PRESS

NORTH COUNTY EDITION

a newspaper of general circulation, printed and published daily in the City of El Centro, County of Imperial and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Imperial, State of California, under the date of October 9, 1951, Case Number 26775; that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

Nov 3, 5, 8, 10, 12, 15, 17 1999

Nov 19, 22, 24, 26, 29 Dec 1, 3 1999

all in the year 1999

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Gloria Valdés

SIGNATURE

* Printer, Foreman of the Printer, or Principal Clerk of the Printer.

Date Dec 6, 1999

at El Centro, California.

DESERT PRINTERS

PROOF OF PUBLI

Proof of Publication of

LEGAL ADVERTISEMENT

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