

RECLAMATION DISTRICT No. 2028

BACON ISLAND
311 East Main St., Ste. 504
Stockton, California 95202

1/3

January 31, 2006

Colonel Ronald N. Light
District Engineer
Sacramento District
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814

Dear Colonel Light:

This letter conveys Reclamation District 2028's (RD 2028) intent to participate in feasibility studies and/or other actions in the development of the Bacon Island Setback Levee Project as the non-Federal sponsor consistent with the CALFED Bay-Delta Authorization Act (Public Law 108-361).

RD 2028 understands that the type, cost, and scope of actions will be determined and specified later if selected for development and/or implementation pursuant to the Act. RD 2028 also understands that if our project is approved for implementation, we will be responsible for sharing the cost of planning, designing, and implementation of the project with the U.S. Army Corps of Engineers; providing all necessary lands, easements, rights-of-way, relocations, excluding railroads, and suitable borrow and dredged or excavated material disposal areas; and accomplishing operation, maintenance, repair, replacement and rehabilitation of the project.

Please note that this letter of intent is not an obligation of funds. We look forward to working with the U.S. Army Corps of Engineers, the State of California, and other pertinent CALFED agencies and stakeholders on this important project.

If you have any questions, you may contact me at 925/287-3494 or Gilbert Cosio at 916/456-4400.

Sincerely,



David Forkel, Trustee

Name: Bacon Island Setback Levee Project

Purpose: The purpose of the project is to setback the levee along 2,000 lineal feet on Bacon Island to reduce slope instability and create habitat.

Location: The project is located on Bacon Island in the Sacramento-San Joaquin Delta, San Joaquin County (Plate 1). Bacon Island is approximately 5,600 acres and is protected by 14.3 miles of levees on the Middle Slough, Old River, and Connection Slough.

Problems: Approximately 2,000 lineal feet of levee on Bacon Island has been experiencing waterside slope instability. Cross section and bathymetric surveys performed in 1996 and 2002 show that there is severe underwater erosion occurring at this location on Bacon Island (Plate 3). From these surveys, the waterside slope has been subject to severe under water erosion over the past 10 years, measures should be taken immediately to reduce the risk of failure due to erosion.

Opportunities: The project presents an opportunity to for environmental enhancement coupled with reducing flood risk on Reclamation District No. 2028. Approximately an acre of habitat would be created to benefit listed species in the Delta by construction of a setback levee. This setback levee would stabilize 2,000 lineal feet of levee that has been experiencing severe erosion in the past 10 years.

Project Description: The project consists of constructing a setback levee along 2,000 lineal feet of levee on Bacon Island (Plate 2). The levee would be setback approximately 20-30 feet from centerline. A 20-30 foot bench on the waterside slope near the mean high water elevation would be incorporated into the levee cross section for habitat enhancement (Plate 3). The waterside bench could be planted with native vegetation and trees to create approximately an acre of habitat. It is estimated that 60,000 cubic yards of material would be required for the setback levee. Project cost is estimated at \$1 million.

Statement of Willingness and Ability to Cost Share: See attached letter.

Point of Contact: Gilbert Cosio, Jr
MBK Engineers
2450 Alhambra Blvd 2nd Floor
Sacramento, CA 95817
Phone: 916/456-4400
Fax: 916/456-0253
Email: Cosio@mbkengineers.com

Scoping & Screening Information:

- In your opinion, what is the urgency for your proposed project? Is there an imminent threat to life, property, critical habitat, or other prominent resource?

The levees currently protect 5,600 acres of agriculture, wildlife habitat, wildlife use, potential habitat for over 10 special status species, recreation, historic-period archaeological resources, two PG&E gas pipelines, and a county road to access Mandeville Island.

The property faces imminent threat to life, property, and habitat every winter during high tides, high wind events, and floodwater periods.

- Would there be a change in the magnitude, frequency, or duration of flood flows in other areas of the levee system as a result of the potential project?

There would not be a change in magnitude, frequency, or duration of flood flows as a result of this project. The project increases the reliability of the levee system on Bacon Island and would not change the flow regime in the river.

- What would the proposed project do to address flooding, ecosystem, water supply and quality, and other problems and needs locally and regionally?

The proposed project would reduce the risk of flooding on Bacon Island. This protection will also reduce the risk of loss of ecosystem benefits derived from the 5,600 acres of agriculture on Bacon Island, protect the water supply and quality of the Delta region as well as the service area of the state and federal water projects exporting water from the Delta, and avoid seepage impacts to neighboring Delta islands similar to the Jones Tract flooding in 2004.

- Are there non-structural or other ways to address flooding, ecosystem, water supply and quality, and other problems in the potential project area and if so what are they?

There are no non-structural alternatives to address the waterside slope instability.

- Who and/or what would benefit from the potential project?

Reducing the flood risk on Bacon Island has local and regional benefits. Bacon Island is located along Old River and Middle River which are two main conveyance channels for the Contra Costa Water District pumps on Old River, the State Water Project, and the Central Valley Project. A levee failure on Bacon Island could also reduce the water quality in the Delta causing the SWP and CVP to cut back exports, and release more water to prevent salt water intrusion and to maintain water quality standards in the Delta. The water quality effects are evident from the Lower Jones break in 2004; a similar scenario or worse would occur if the Bacon Island were to fail.

- What is the likely Federal, State and local agency support?

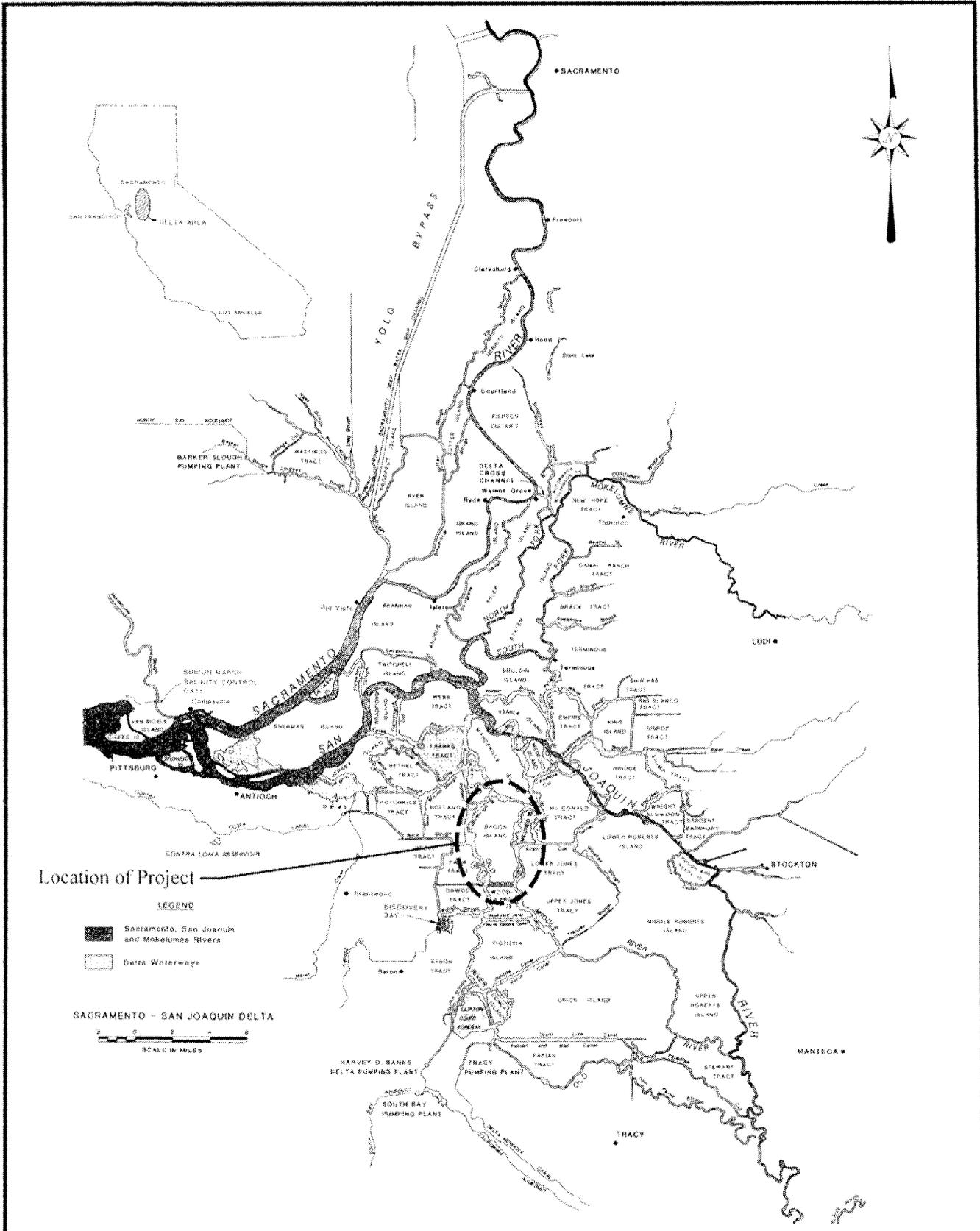
It is anticipated the State support would come from the Department of Water Resources Delta Levee Subventions Program and local support from Reclamation District No. 2028.

- Are there any known challenges or obstacles that may delay rapid development and implementation of your potential project?

There are no known challenges or obstacles that would delay rapid development and implementation of the project. Bacon Island has a single landowner which is committed to implementing projects that would reduce the flood risk on the island.

- Is your agency ready, willing, and able to serve as a non-Federal sponsor for this potential project, and able to provide required cost-sharing and other assurances?

Reclamation District No. 2028 is willing to serve as the non-Federal sponsor for any potential projects on the island that would reduce the flood risk.



Location Map

**Reclamation District No. 2028
Bacon Island**



2450 Alhambra Boulevard, 2nd Floor
Sacramento, California 95817
Phone (916) 456-4400 • Fax (916) 456-0253



Reference BM:
 NGS BM "B95250"
 Disc inside of a white PVC pipe projected
 3 inches above the ground. Located at
 Station 501+11 on the landside shoulder.

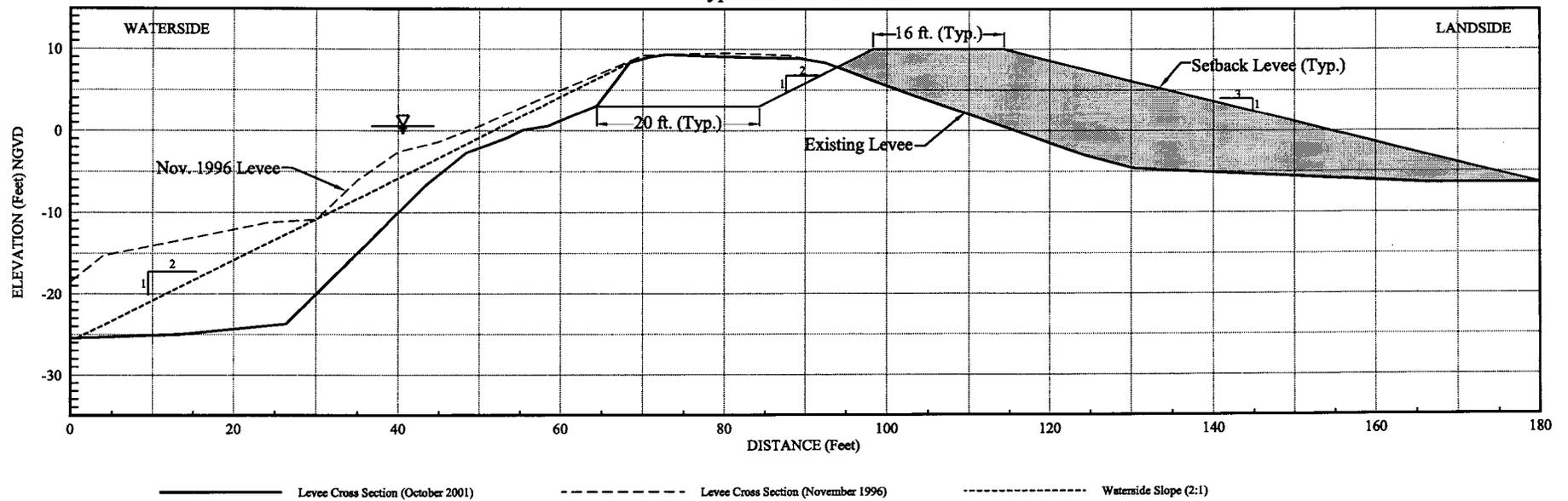
Image Source: USGS High Resolution Orthoimage 05/2002

MBK
ENGINEERS
 2450 Alhambra Boulevard, 2nd Floor
 Sacramento, California 95817
 Phone (916) 456-4100 • Fax (916) 456-0251

Reclamation District No. 2028
 Bacon Island
LOCATION MAP

SCALE	1" = 800'	SHEET 1 OF 1 DATE 01/27/10
REVISION NUMBER	0001	
DRAWN BY	MS	
DATE	October 2005	
<small>Plot Lengths Use Original Drawing Symbols One Inch Adjust Scale Accordingly</small>		

Typical Levee Cross Section



2450 Alhambra Boulevard, 2nd Floor
 Sacramento, California 95817
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BACON ISLAND
311 East Main St., Ste. 504
Stockton, California 95202

2/3

January 31, 2006

Colonel Ronald N. Light
District Engineer
Sacramento District
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814

Dear Colonel Light:

This letter conveys Reclamation District 2028's (RD 2028) intent to participate in feasibility studies and/or other actions in the development of the Bacon Island Bank Protection Project as the non-Federal sponsor consistent with the CALFED Bay-Delta Authorization Act (Public Law 108-361).

RD 2028 understands that the type, cost, and scope of actions will be determined and specified later if selected for development and/or implementation pursuant to the Act. RD 2028 also understands that if our project is approved for implementation, we will be responsible for sharing the cost of planning, designing, and implementation of the project with the U.S. Army Corps of Engineers; providing all necessary lands, easements, rights-of-way, relocations, excluding railroads, and suitable borrow and dredged or excavated material disposal areas; and accomplishing operation, maintenance, repair, replacement and rehabilitation of the project.

Please note that this letter of intent is not an obligation of funds. We look forward to working with the U.S. Army Corps of Engineers, the State of California, and other pertinent CALFED agencies and stakeholders on this important project.

If you have any questions, you may contact me at 925/287-3494 or Gilbert Cosio at 916/456-4400.

Sincerely,



David Forkel, Trustee

DT/pp

4290.1/RONALD LIGHT BANK PROTECTION 01.31.06.DOC

Name: Bacon Island Bank Protection Project

Purpose: The purpose of the project is place riprap on the waterside slope of Bacon Island to protect the levee against wind and wave forces.

Location: The project is located on Bacon Island in the Sacramento-San Joaquin Delta, San Joaquin County (Plate 1). Bacon Island is approximately 5,600 acres and is protected by 14.3 miles of levees on the Middle Slough, Old River, and Connection Slough.

Problems: The current levee cross section maintained on Bacon Island is the Short Term Hazard Mitigation (HMP) plan cross section. Under this cross section standard, the top of levee crown is maintained to an elevation of 1 foot above the 100 year flood elevations. This is the elevation at which, along portions of the levee, the riprap on the waterside slope is placed up to. A foot of freeboard provides minimal protection to erosion caused by wind fetch waves which could splash onto the levee crown and erode the crown and landside slope. Wind fetch waves are of particular concern on east and west side of Bacon Island. Wave forces from boat wakes also cause erosion of the waterside slope requiring constant maintenance of the revetted slope.

Opportunities: Opportunities may exist in conjunction with this project to plant tules at the base of the waterside slope for habitat enhancement. The tules would also aide in dissipating wave energy thus reducing the flood risk on Bacon Island. A more detailed site investigation would have to be undertaken during the feasibility phase of the project to determine if tules or other plant species can be planted.

Project Description: The project consists of placing riprap on the waterside slope of the levee on Bacon Island to reduce the risk of flooding due to erosion (Plate 2). Riprap would be placed from the existing top of rock to the PL-99 elevation (100 yr + 2 feet). In critical reaches where there is a long wind fetch, a splash cap would be constructed 18-24 inches above the PL-99 elevation. This splash cap would help prevent damage to the levee crown and land side slope from wind driven waves. Levee reaches would have to be evaluated during the feasibility phase to determine if riprap could be placed to the PL-99 elevation. There are areas along the levee reach where the levee crown is narrow and placing riprap higher would encroach upon the levee crown. Project cost is estimated at \$2.5 million.

Statement of Willingness and Ability to Cost Share: See attached letter.

Point of Contact: Gilbert Cosio, Jr
MBK Engineers
2450 Alhambra Blvd 2nd Floor
Sacramento, CA 95817
Phone: 916/456-4400
Fax: 916/456-0253
Email: Cosio@mbkengineers.com

Scoping & Screening Information:

- In your opinion, what is the urgency for your proposed project? Is there an imminent threat to life, property, critical habitat, or other prominent resource?

The levees currently protect 5,600 acres of agriculture, wildlife habitat, wildlife use, potential habitat for over 10 special status species, recreation, historic-period archaeological resources, two PG&E gas pipelines, and a county road for access to Mandeville Island.

The property faces imminent threat to life, property, and habitat every winter during high tides, high wind events, and floodwater periods.

- Would there be a change in the magnitude, frequency, or duration of flood flows in other areas of the levee system as a result of the potential project?

There would not be a change in magnitude, frequency, or duration of flood flows as a result of this project.

- What would the proposed project do to address flooding, ecosystem, water supply and quality, and other problems and needs locally and regionally?

The proposed project would reduce the risk of flooding on Bacon Island. This protection will also reduce the risk of loss of ecosystem benefits derived from the 5,600 acres of agriculture on Bacon Island, protect the water supply and quality of the Delta region as well as the service area of the state and federal water projects exporting water from the Delta, and avoid seepage impacts to neighboring Delta islands similar to the Jones Tract flooding in 2004.

- Are there non-structural or other ways to address flooding, ecosystem, water supply and quality, and other problems in the potential project area and if so what are they?

There are no non-structural elements that could be implemented to reduce the flood risk.

- Who and/or what would benefit from the potential project?

Reducing the flood risk on Bacon Island has local and regional benefits. Bacon Island is located along Old River and Middle River which are two main conveyance channels for the Contra Costa Water District pumps on Old River, the State Water Project, and the Central Valley Project. A levee failure on Bacon Island could also reduce the water quality in the Delta causing the SWP and CVP to cut back exports, and release more water to prevent salt water intrusion and to maintain water quality standards in the Delta. The water quality effects are evident from the Lower Jones

break in 2004; a similar scenario or worse would occur if the Bacon Island were to fail.

- What is the likely Federal, State and local agency support?

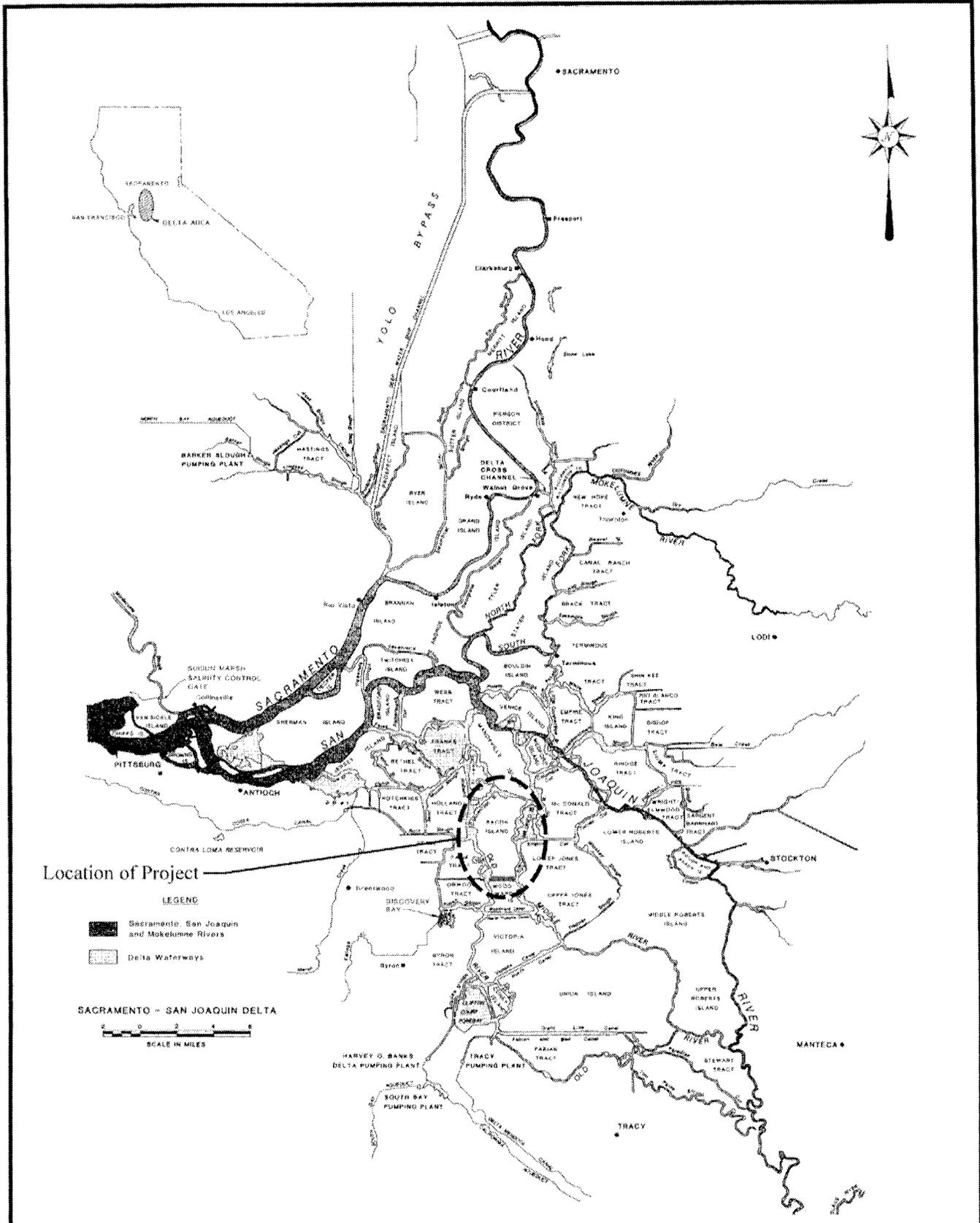
It is anticipated the State support would come from the Department of Water Resources Delta Levee Subventions Program and local support from Reclamation District No.2028.

- Are there any known challenges or obstacles that may delay rapid development and implementation of your potential project?

There are no known challenges or obstacles that would delay rapid development and implementation of the project. Bacon Island has a single landowner which is committed to implementing projects that would reduce the flood risk on the island.

- Is your agency ready, willing, and able to serve as a non-Federal sponsor for this potential project, and able to provide required cost-sharing and other assurances?

Reclamation District No. 2028 is willing to serve as the non-Federal sponsor for any potential projects on the island that would reduce the risk of flooding.



Location of Project

LEGEND

-  Sacramento, San Joaquin and Mokelumne Rivers
-  Delta Waterways

SACRAMENTO - SAN JOAQUIN DELTA



Location Map

**Reclamation District No. 2028
Bacon Island**



2450 Alhambra Boulevard, 2nd Floor
Sacramento, California 95817
Phone (916) 456-4400 • Fax (916) 456-0253



Reference BM:
 NGS BM "B93250"
 Disc inside of a white PVC pipe projected
 3 inches above the ground. Located at
 Station 501+11 on the landside shoulder.

Image Source: USGS High Resolution Orthoimage 05/2002

MBK
ENGINEERS
 2450 Alhambra Boulevard, 2nd Floor
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Reclamation District No. 2028
 Bacon Island

LOCATION MAP

SCALE:	1" = 300'
JOB NUMBER:	4590-00
DRAWN BY:	SZF
DATE:	October 2005
<small>Has Length-Only (Original Drawing) Equivalents One Inch, Adjust Scale Accordingly</small>	

SHEET
 1
 OF
 1
 SHEETS

3/3
RECLAMATION DISTRICT No. 2028

BACON ISLAND

311 East Main St., Ste. 504
Stockton, California 95202

January 31, 2006

Colonel Ronald N. Light
District Engineer
Sacramento District
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814

Dear Colonel Light:

This letter conveys Reclamation District 2028's (RD 2028) intent to participate in feasibility studies and/or other actions in the development of the Bacon Island Levee Rehabilitation Project as the non-Federal sponsor consistent with the CALFED Bay-Delta Authorization Act (Public Law 108-361).

RD 2028 understands that the type, cost, and scope of actions will be determined and specified later if selected for development and/or implementation pursuant to the Act. RD 2028 also understands that if our project is approved for implementation, we will be responsible for sharing the cost of planning, designing, and implementation of the project with the U.S. Army Corps of Engineers; providing all necessary lands, easements, rights-of-way, relocations, excluding railroads, and suitable borrow and dredged or excavated material disposal areas; and accomplishing operation, maintenance, repair, replacement and rehabilitation of the project.

Please note that this letter of intent is not an obligation of funds. We look forward to working with the U.S. Army Corps of Engineers, the State of California, and other pertinent CALFED agencies and stakeholders on this important project.

If you have any questions, you may contact me at 925/287-3494 or Gilbert Cosio at 916/456-4400.

Sincerely,



David Forkel, Trustee

DT/pp

4290.1/RONALD LIGHT LEVEE REHAB 01.27.06.DOC

Name: Bacon Island Levee Rehabilitation Project

Purpose: The purpose of the project is to rehabilitate the existing Bacon Island levee to the Corps of Engineers PL-99 cross section standard.

Location: The project is located on Bacon Island in the Sacramento-San Joaquin Delta, San Joaquin County (Plate 1). Bacon Island is approximately 5,600 acres and is protected by 14.3 miles of levees on the Middle Slough, Old River, and Connection Slough.

Problems: The current levee cross section maintained on Bacon Island is subject to failure by overtopping, erosion, subsidence, and seismicity. Levees of Bacon Island are currently maintained to the Short Term Hazard Mitigation Plan (HMP) cross section. This cross section calls for a 16 foot levee crown at 1.0 feet above the 100 year flood elevation with a 1.5H:1V waterside slope and a 2H:1V landside slope. This cross section provides minimal freeboard for overtopping due to high river flows, high tides, and high winds. Also, the levees are built on a peat foundation which is constantly subsiding causing embankment cracking, loss of freeboard and continual maintenance. The cross section also has little to no resistance to earthquake forces. The Bacon Island levees under the current HMP cross section are at risk to a catastrophic levee failure.

Opportunities: Opportunities may exist to plant the new levee toe berm with native vegetation to create upland habitat. A number of factors would have to be evaluated to determine if this is feasible.

Project Description: The project consists of placing fill material on the landside slope and levee crown to achieve the PL-99 cross section standard along critical reaches of the Bacon Island levee (Plate 2). Rehabilitating the Bacon Island levee to the PL-99 cross section standard would reduce the flood risk on the island. Bacon Island also has deep deposits of peat material. Construction of the PL-99 cross section would eliminate or minimize the subsidence within the levee structural section. This would greatly reduce the operation & maintenance cost associated with subsidence of the current levee. The PL-99 cross section standard calls for a 16 foot levee crown 2.0 feet above the 100 year flood elevation. It has a 2H:1V waterside slope and a 4H:1V landside slope (Plate 3). It is estimated that approximately 400,000 cubic yards of material would be needed to rehabilitate the entire 14.3 miles of levee to the PL-99 standard. The proposed project would address the most critical reaches of the levee which would be identified in the feasibility phase of the project. The Reclamation District is seeking a project on the order of \$6 million dollars to rehabilitate the critical reaches of the levee.

Statement of Willingness and Ability to Cost Share: See attached letter.

Point of Contact: Gilbert Cosio, Jr
MBK Engineers
2450 Alhambra Blvd 2nd Floor
Sacramento, CA 95817
Phone: 916/456-4400
Fax: 916/456-0253
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Scoping & Screening Information:

- In your opinion, what is the urgency for your proposed project? Is there an imminent threat to life, property, critical habitat, or other prominent resource?

The levees currently protect 5,600 acres of agriculture, wildlife habitat, wildlife use, potential habitat for over 10 special status species, recreation, historic-period archaeological resources, two PG&E gas pipelines, and a county road for access to Mandeville Island.

The property faces imminent threat to life, property, and habitat every winter during high tides, high wind events, and floodwater periods.

- Would there be a change in the magnitude, frequency, or duration of flood flows in other areas of the levee system as a result of the potential project?

There would not be a change in magnitude, frequency, or duration of flood flows as a result of this project.

- What would the proposed project do to address flooding, ecosystem, water supply and quality, and other problems and needs locally and regionally?

The proposed project would reduce the risk of flooding on Bacon Island. This protection will also reduce the risk of loss of ecosystem benefits derived from the 5,600 acres of agriculture on Bacon Island, protect the water supply and quality of the Delta region as well as the service area of the state and federal water projects exporting water from the Delta, and avoid seepage impacts to neighboring Delta islands similar to the Jones Tract flooding in 2004.

- Are there non-structural or other ways to address flooding, ecosystem, water supply and quality, and other problems in the potential project area and if so what are they?

There are no non-structural elements that could be implemented to reduce the flood risk.

- Who and/or what would benefit from the potential project?

Reducing the flood risk on Bacon Island has local and regional benefits. Bacon Island is located along Old River and Middle River which are two main conveyance channels for the Contra Costa Water District pumps on Old River, the State Water Project, and the Central Valley Project. A levee failure on Bacon Island could also reduce the water quality in the Delta causing the SWP and CVP to cut back exports, and release more water to prevent salt water intrusion and to maintain water quality standards in the Delta. The water quality effects are evident from the Lower Jones break in 2004; a similar scenario or worse would occur if the Bacon Island were to fail.

- What is the likely Federal, State and local agency support?

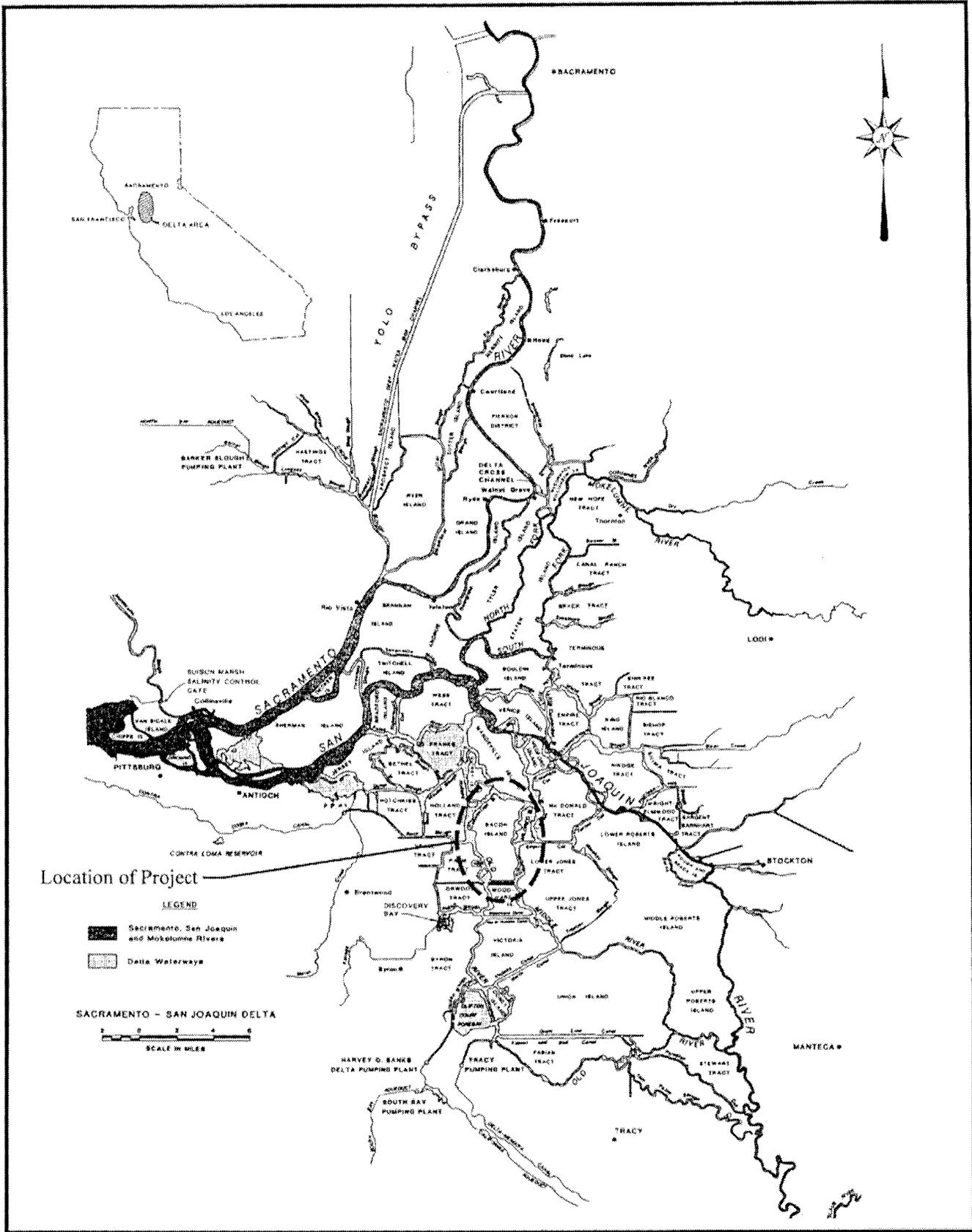
It is anticipated the State support would come from the Department of Water Resources Delta Levee Subventions Program and local support from Reclamation District No. 2028.

- Are there any known challenges or obstacles that may delay rapid development and implementation of your potential project?

There are no known challenges or obstacles that would delay rapid development and implementation of the project. Bacon Island has a single landowner which is committed to implementing projects that would reduce the flood risk on the island.

- Is your agency ready, willing, and able to serve as a non-Federal sponsor for this potential project, and able to provide required cost-sharing and other assurances?

Reclamation District No. 2028 is willing to serve as the non-Federal sponsor for any potential projects on the island that would reduce the risk of flooding.

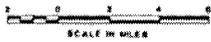


Location of Project

LEGEND

-  Sacramento, San Joaquin and Mokelumne Rivers
-  Delta Waterways

SACRAMENTO - SAN JOAQUIN DELTA



Location Map

Reclamation District No. 2028
Bacon Island



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Reference BM:
 NGS BM "B95250"
 Disc inside of a white PVC pipe projected
 3 inches above the ground. Located at
 Station 501+11 on the landside shoulder.

Image Source: USGS High Resolution Orthoimage 05/2002



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Reclamation District No. 2028
 Bacon Island

LOCATION MAP

SCALE	1" = 500'	SHEET	1
JOB NUMBER	2002-10	OF	1
DRAWN BY	SPJ		
DATE	October 2003		
<small>The Length On Original Drawing Equals One Inch Adjust Scale Accordingly</small>			
		SHEET	1

RD 2028, Bacon Island - Typical PL-99 Levee Cross Section

