



Reclamation Services MSR and SOI Update Refresher

November 18, 2009

Contra Costa Local Agency Formation Commission
Burr Consulting and Baracco & Associates

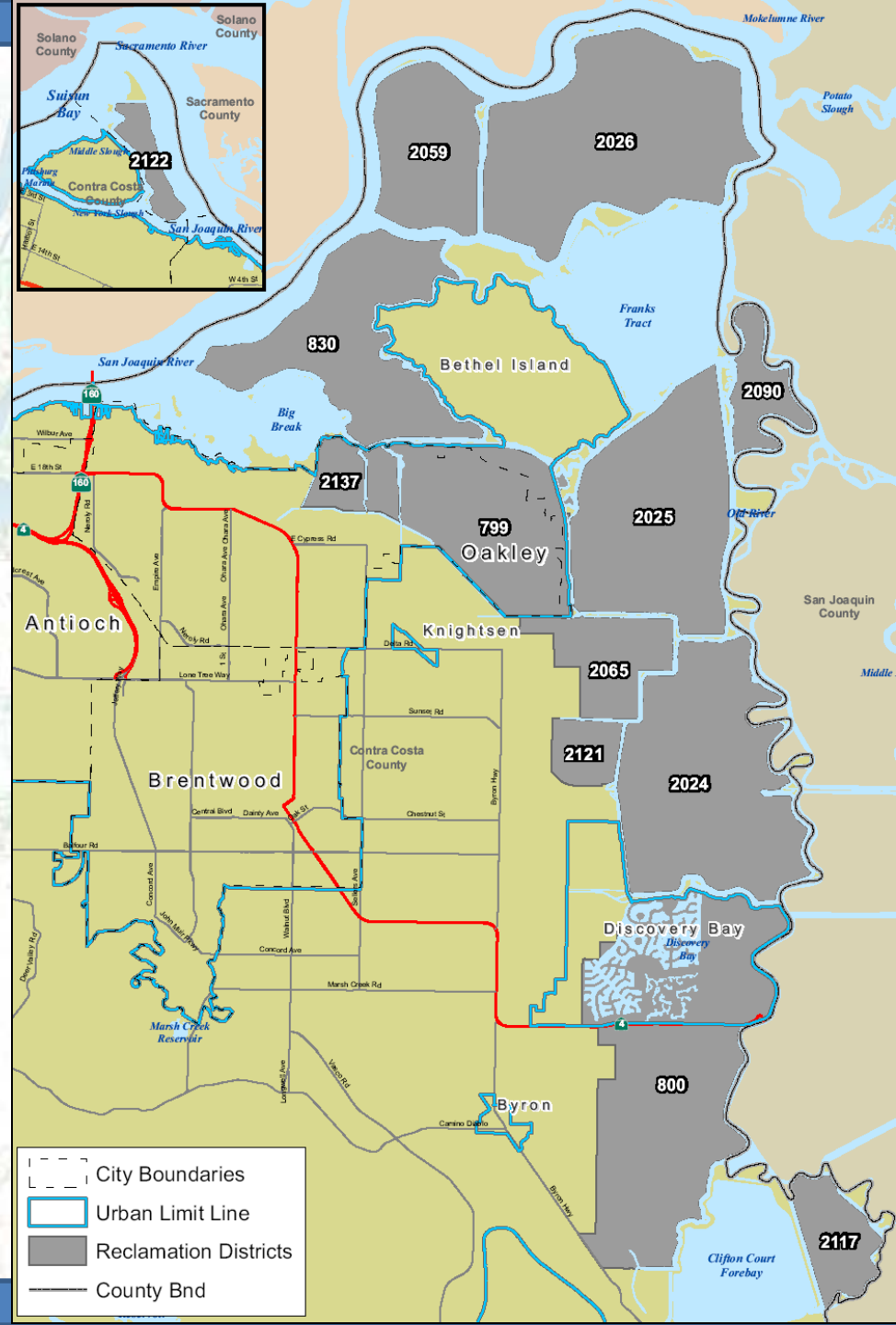
❖ 13 RDs in Contra Costa County

❖ BIMID MSR adopted in 2008

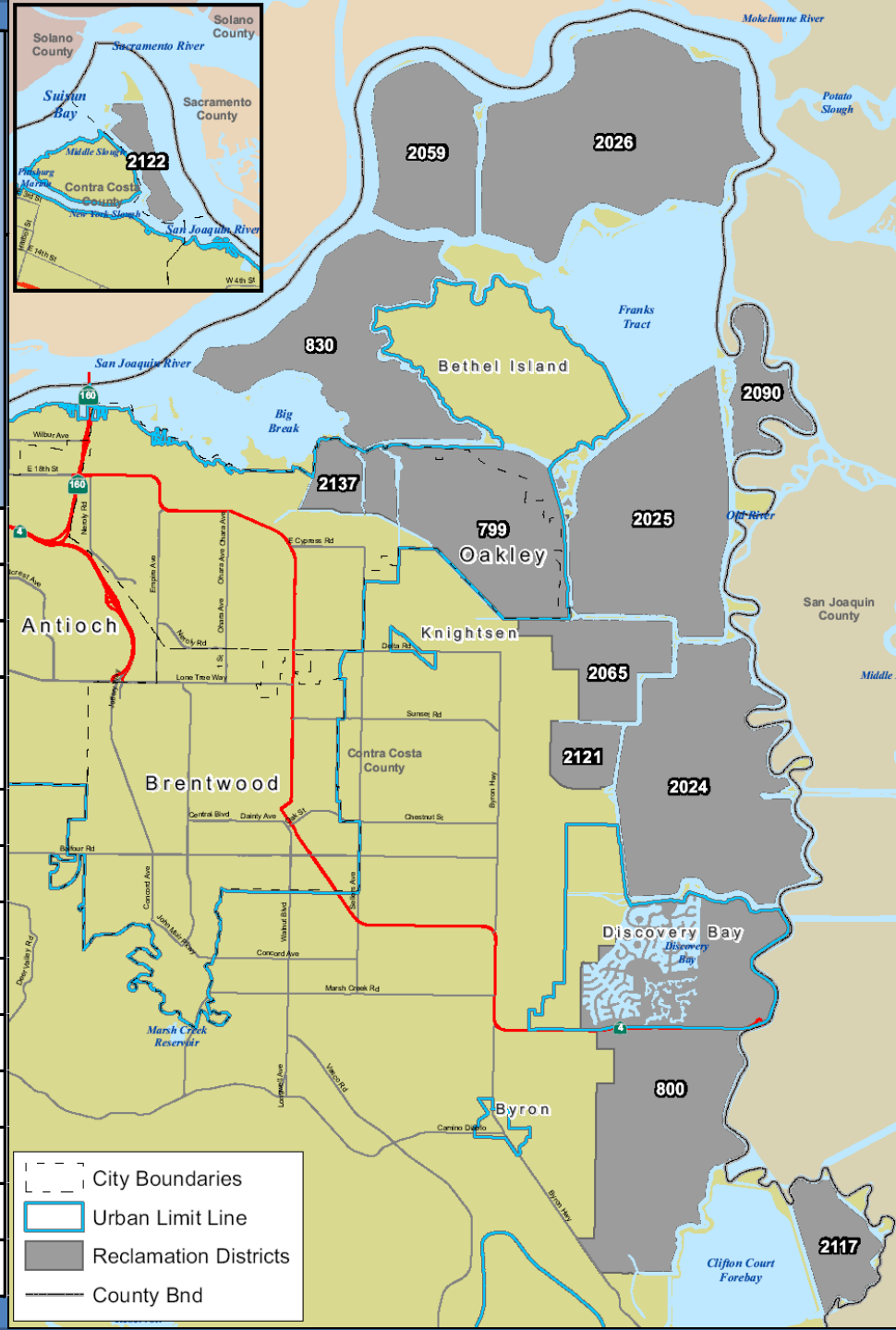
❖ Critical Islands:

- ❖ Bethel (BIMID)
- ❖ Bradford (RD 2059)
- ❖ Holland (RD 2025)
- ❖ Hotchkiss (RD 799)
- ❖ Jersey (RD 830)
- ❖ Webb (RD 2026)

-Water Code §12311



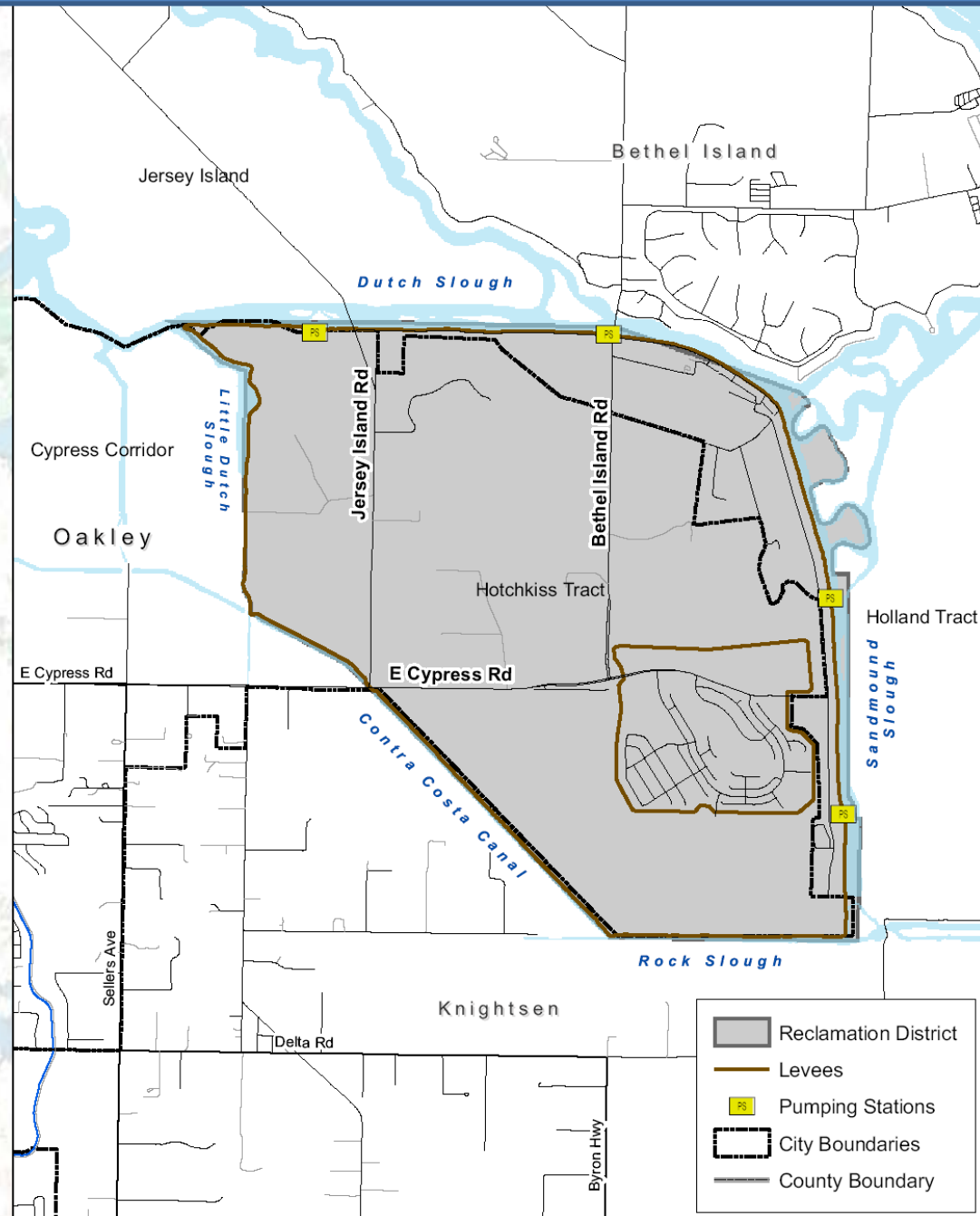
District Name	Primary Land Use			Acres	Pop.
	Residential	Agricultural	Wetlands		
RD 799 Hotchkiss Tract	✓	✓		3,100	969
RD 800 Byron Tract	✓	✓		6,933	7,656
RD 830 Jersey Island		✓		3,750	3
RD 2024 Orwood/Palm Tract		✓		6,574	40
RD 2025 Holland Tract		✓		4,090	27
RD 2026 Webb Tract		✓		5,500	0
RD 2059 Bradford Island		✓		2,200	48
RD 2065 Veale Tract		✓		1,298	14
RD 2090 Quimby Island		✓		769	8
RD 2117 Coney Island		✓		935	4
RD 2121 Bixler Tract		✓		584	5
RD 2122 Winter Island			✓	453	0
RD 2137		✓		785	2



- City Boundaries
- Urban Limit Line
- Reclamation Districts
- County Bnd

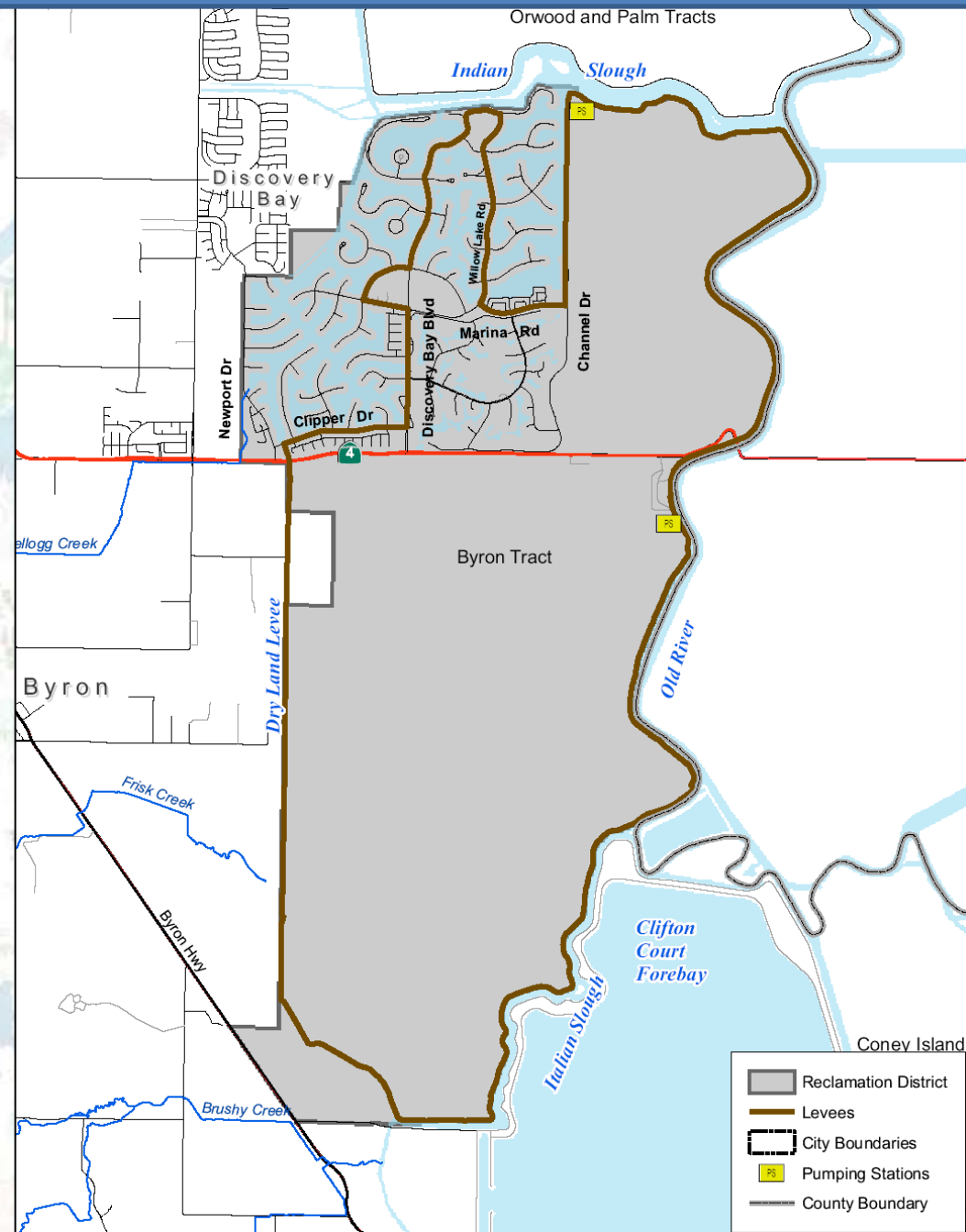
RD 799

- ❖ Residential and Ag
- ❖ Levees: 11.7 mi.
 - ❖ 3.2 mi. at FEMA
 - ❖ 5.2 mi. at HMP
 - ❖ 3.3 mi. below HMP
- ❖ Surface Elev.: -5 to +5 ft.
- ❖ Base Flood Elev.: 7 ft.
- ❖ Direct staffing
- ❖ Prepares Budget? Yes
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? Yes
- ❖ Capital Planning? Yes



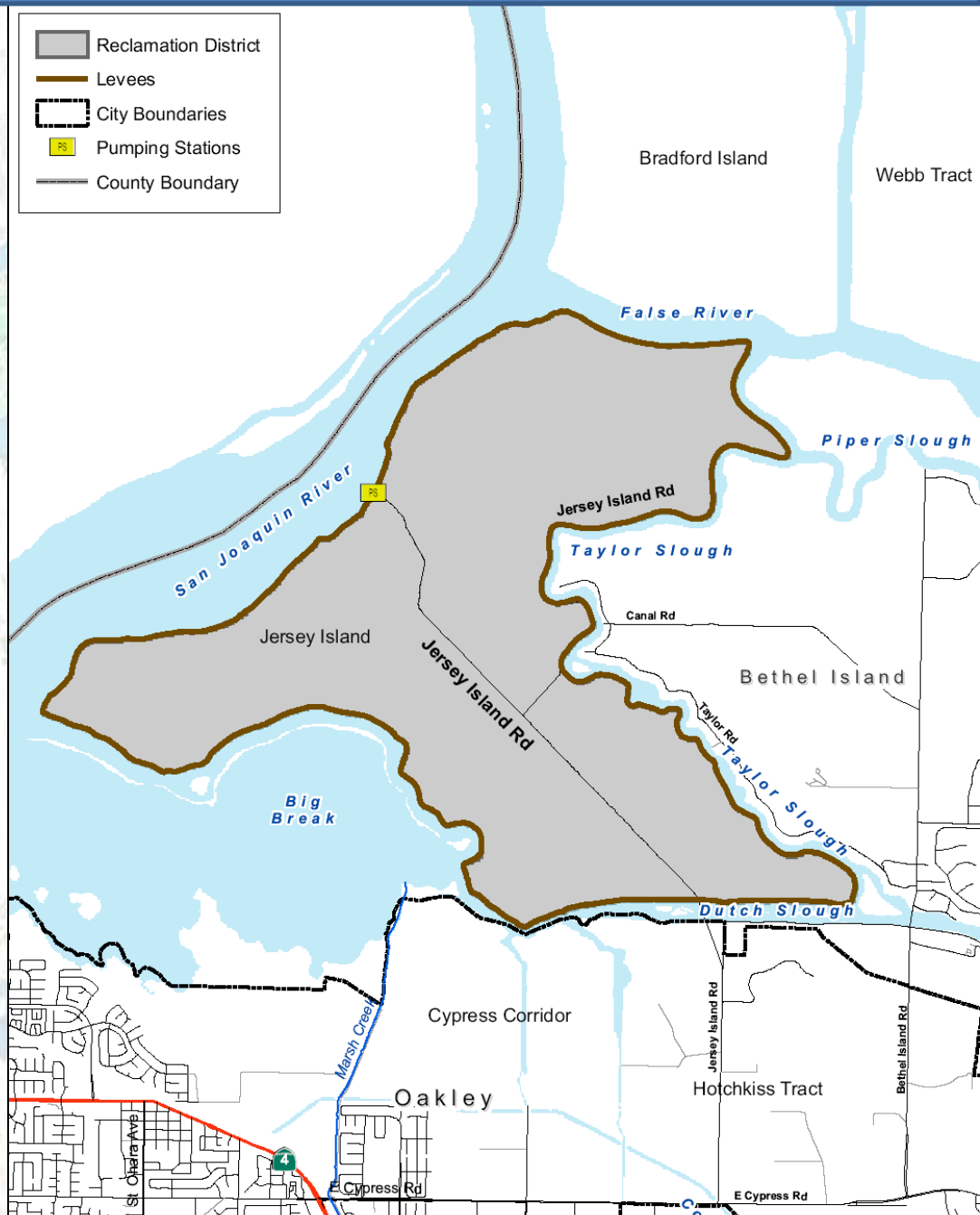
RD 800

- ❖ Residential and Ag
- ❖ Levees: 18.9 mi.
 - ❖ 9.2 mi. at FEMA
 - ❖ 9.7 mi. at PL-99
- ❖ Surface Elev.: -4 to +13 ft.
- ❖ Base Flood Elev.: <1 ft.
- ❖ Direct staffing
- ❖ Prepares Budget? Yes
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? No
- ❖ Capital Planning? Yes



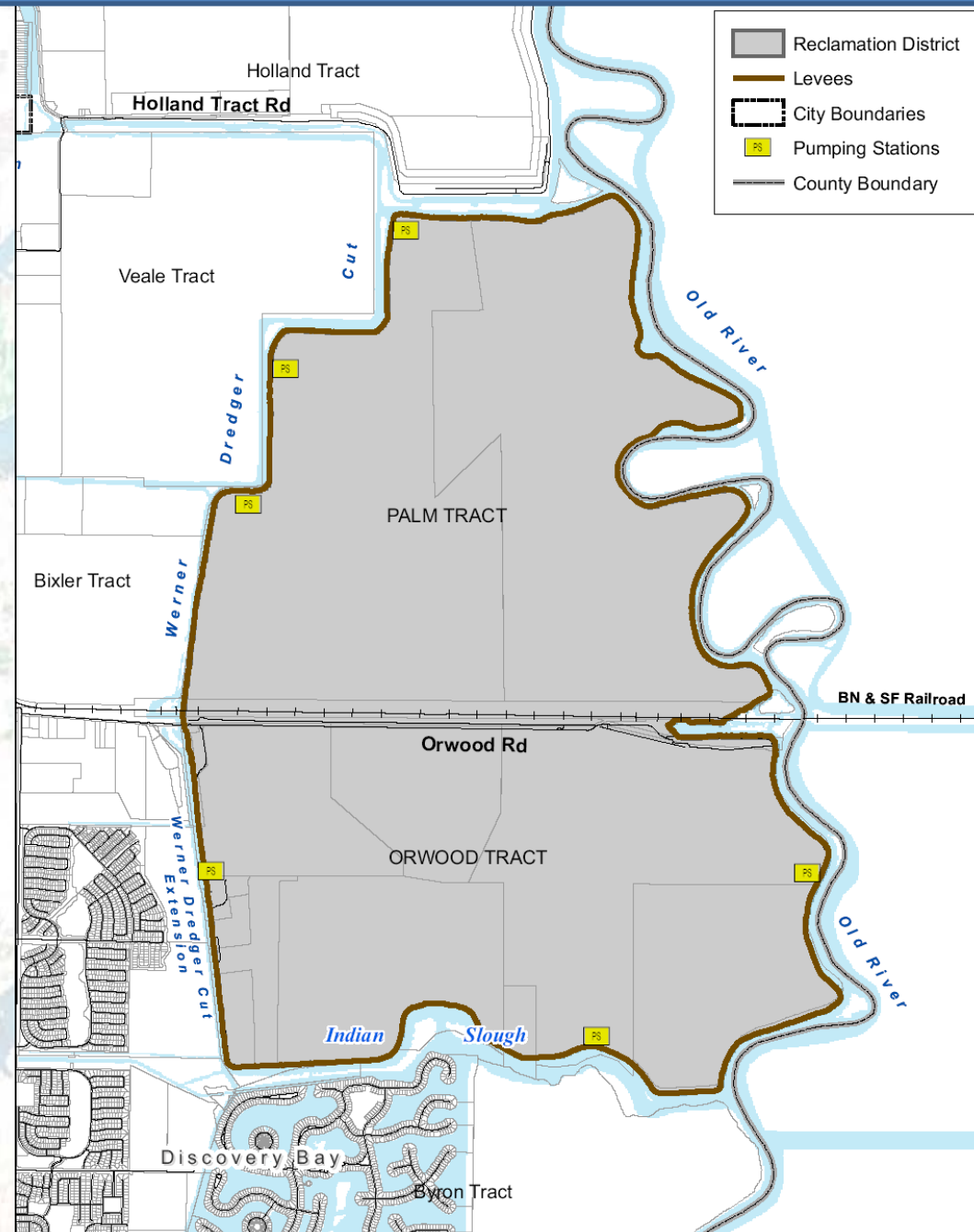
RD 830

- ❖ Agricultural
- ❖ Levees: 16 mi.
 - ❖ 6.3 mi. at HMP
 - ❖ 9.7 mi. below HMP
- ❖ Surface Elev.: 0 to -15 ft.
- ❖ Base Flood Elev.: 7 ft.
- ❖ Staffing by contract
- ❖ Prepares Budget? Yes
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? Yes
- ❖ Capital Planning? Yes



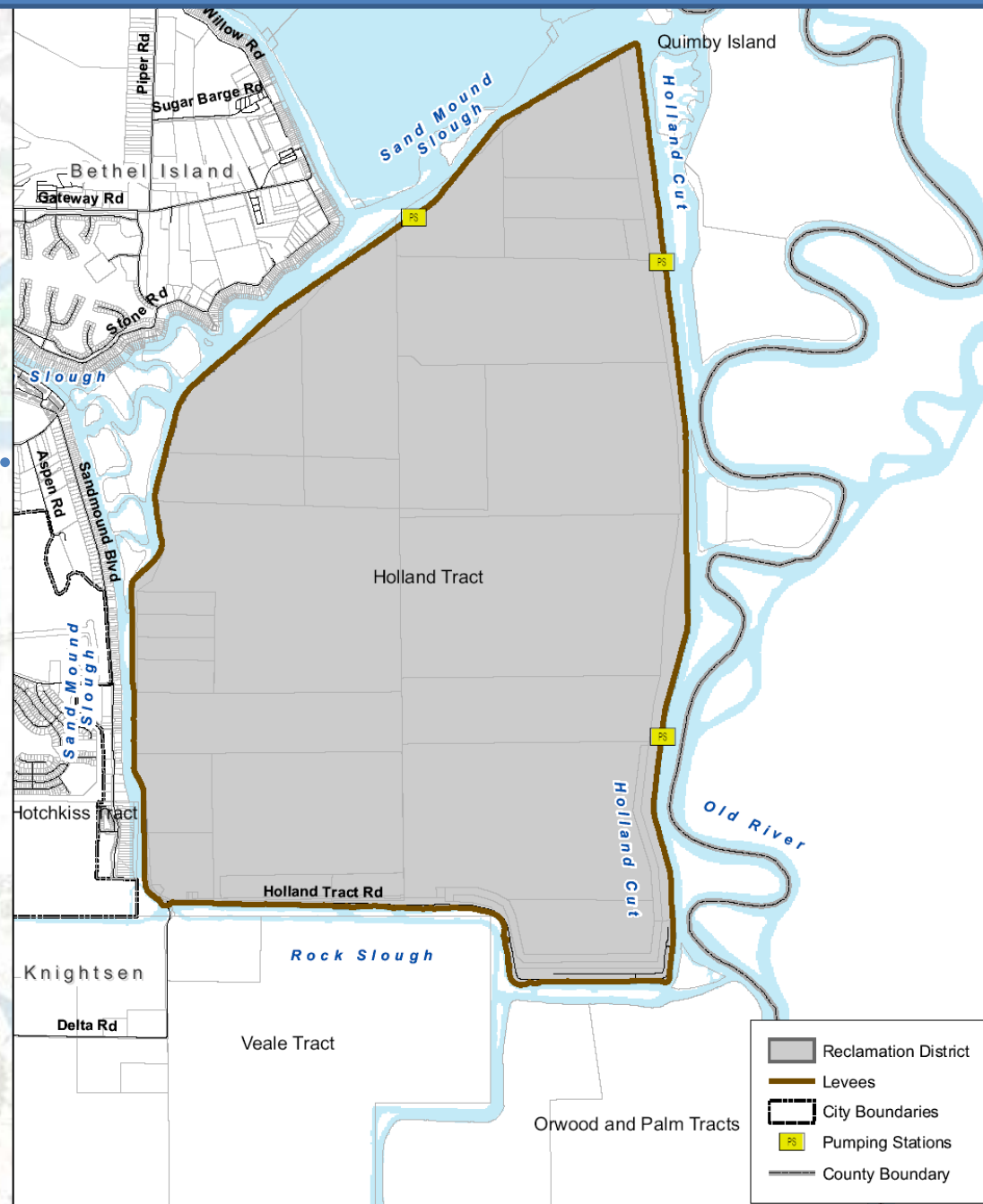
RD 2024

- ❖ Agricultural
- ❖ Levees: 14.6 mi.
 - ❖ 14.6 mi. at HMP
- ❖ Surface Elev.: 0 to -15 ft.
- ❖ Base Flood Elev.:
 - ❖ 8 ft. (Orwood)
 - ❖ 7 ft. (Palm)
- ❖ Staffing by contract
- ❖ Prepares Budget? Yes
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? No
- ❖ Capital Planning? Yes



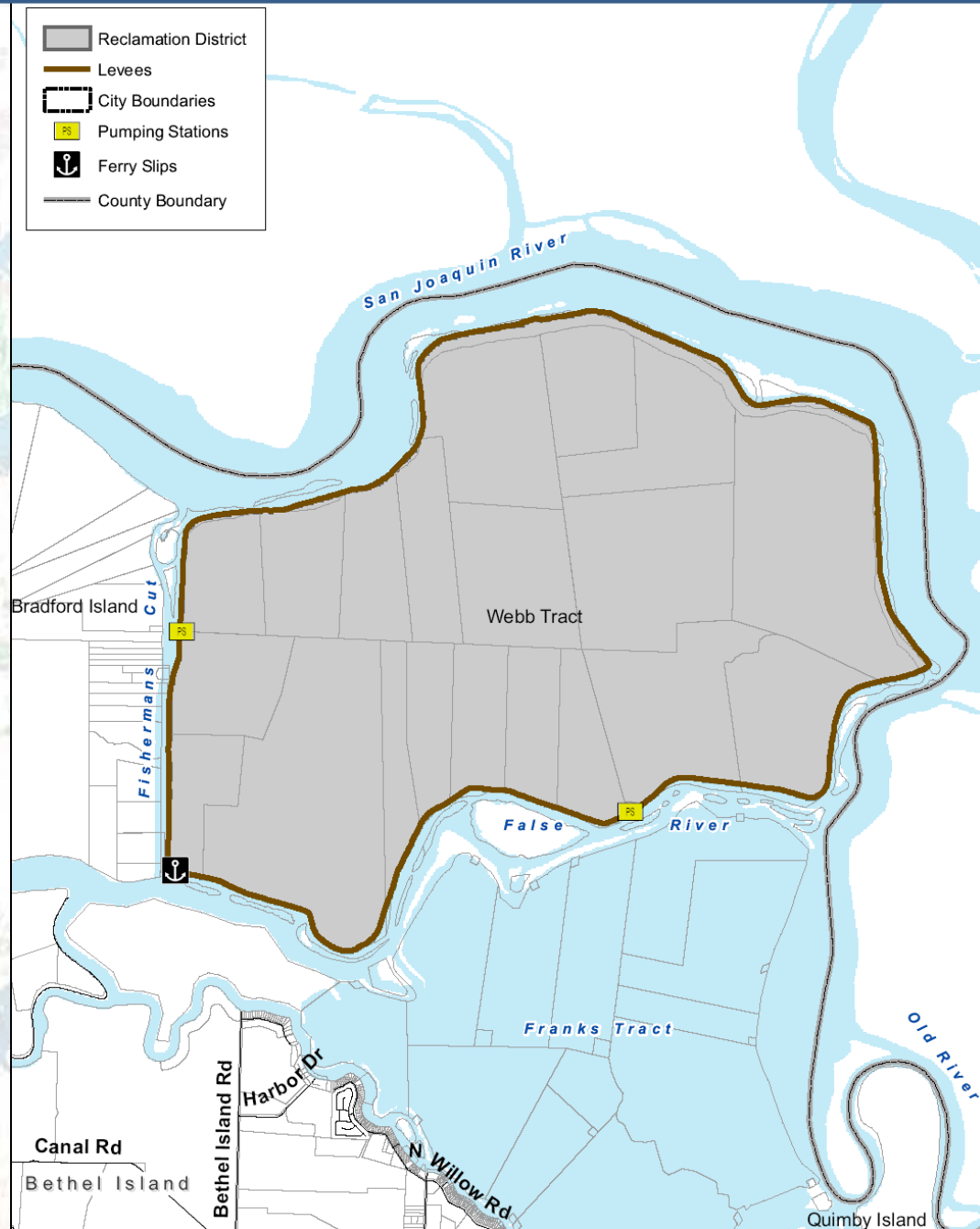
RD 2025

- ❖ Agricultural
- ❖ Levees: 11 mi.
 - ❖ 11 mi. at HMP
- ❖ Surface Elev.: 0 to -15 ft.
- ❖ Base Flood Elev.: 7 ft.
- ❖ Staffing by contract
- ❖ Prepares Budget? Yes
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? No
- ❖ Capital Planning? Yes



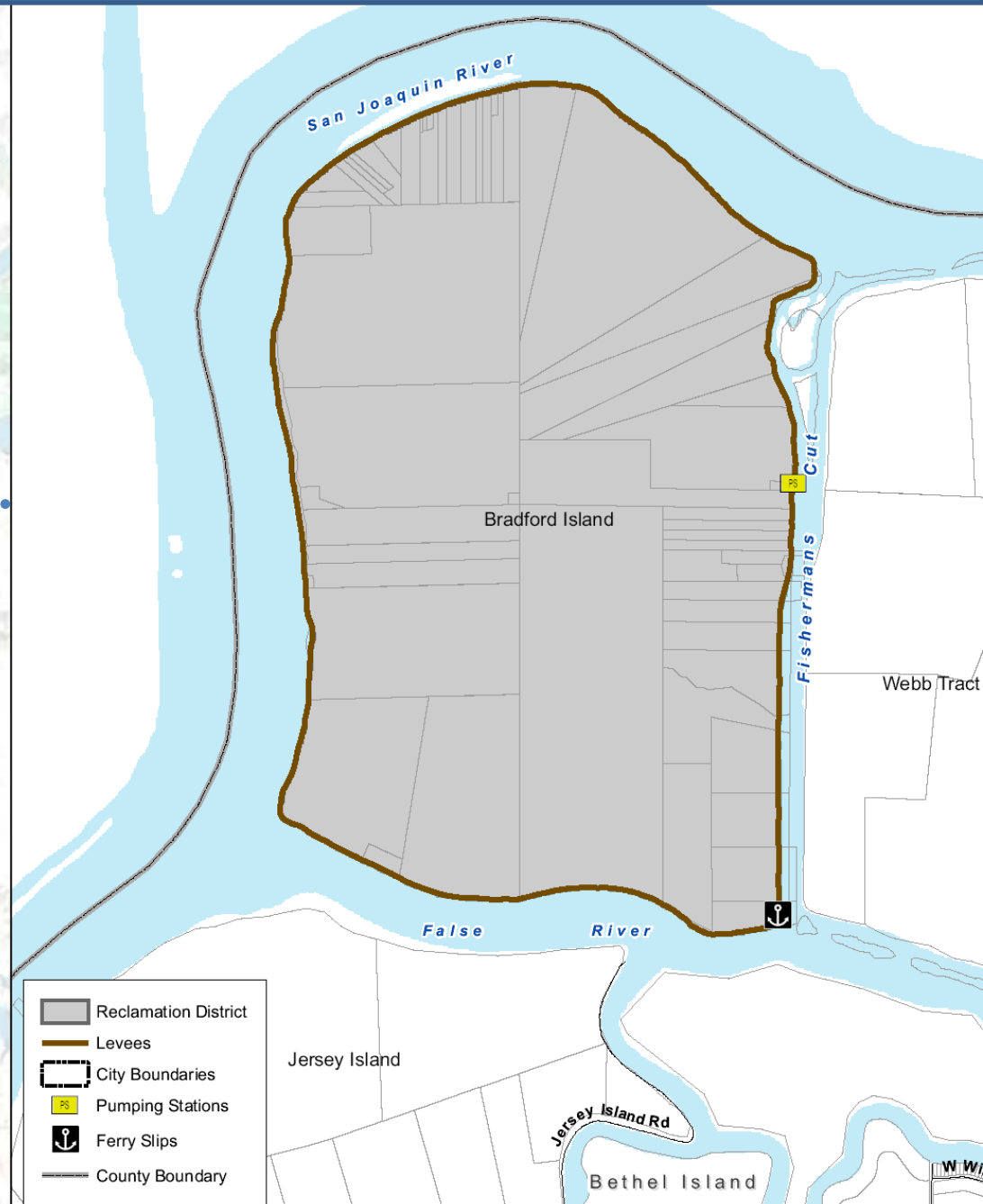
RD 2026

- ❖ Agricultural
- ❖ Levees: 12.9 mi.
 - ❖ 12.9 mi. at HMP
- ❖ Surface Elev.: -5 to -20 ft.
- ❖ Base Flood Elev.: 7 ft.
- ❖ Staffing by contract
- ❖ Prepares Budget? Yes
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? No
- ❖ Capital Planning? Yes



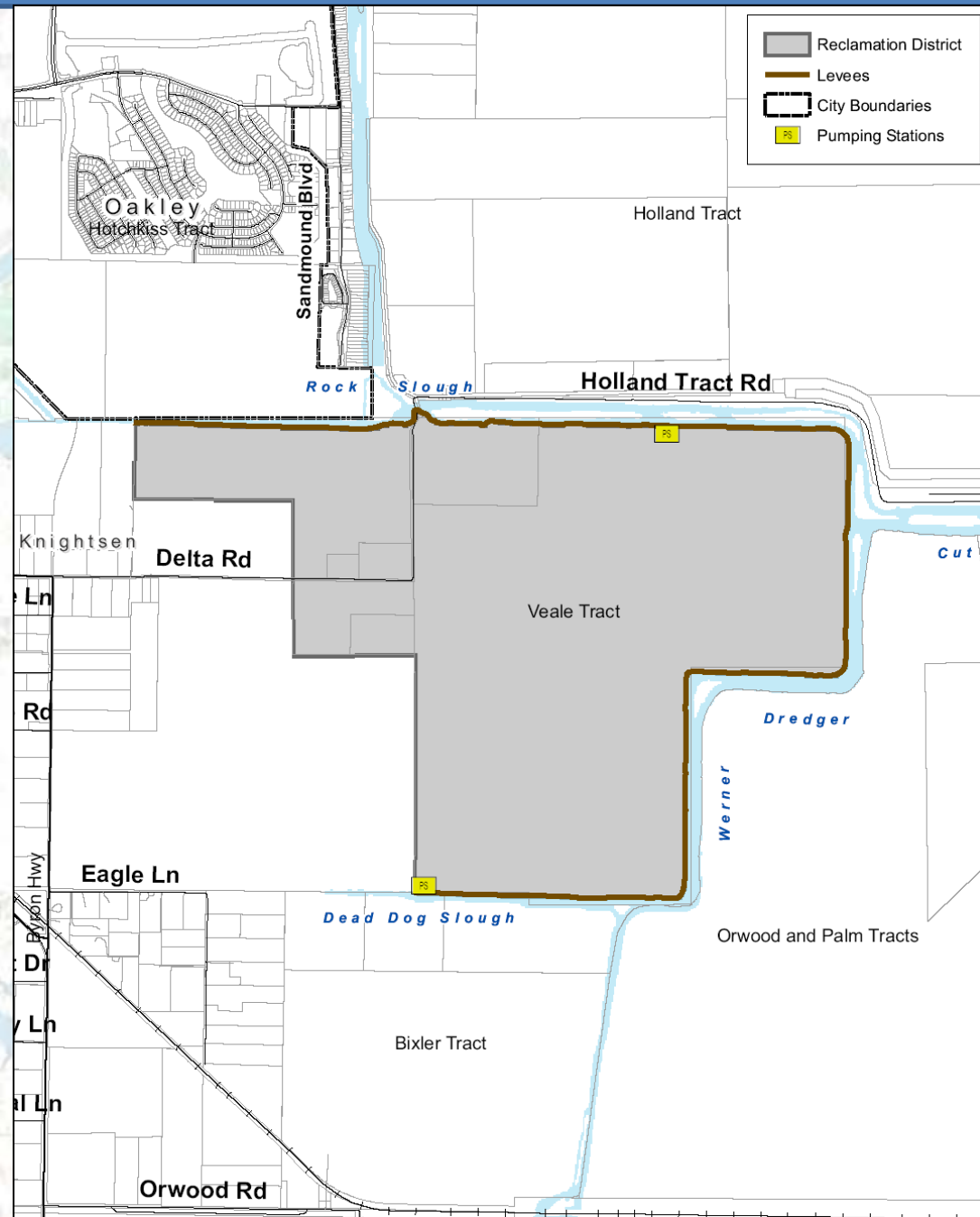
RD 2059

- ❖ Primarily Ag (Pop. 48)
- ❖ Levees: 7.5 mi.
 - ❖ 4.0 mi. at HMP
 - ❖ 3.5 mi. below HMP
- ❖ Surface Elev.: -5 to -15 ft.
- ❖ Base Flood Elev.: 7 ft.
- ❖ Direct staffing
- ❖ Prepares Budget? Yes
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? Yes
- ❖ Capital Planning? Yes



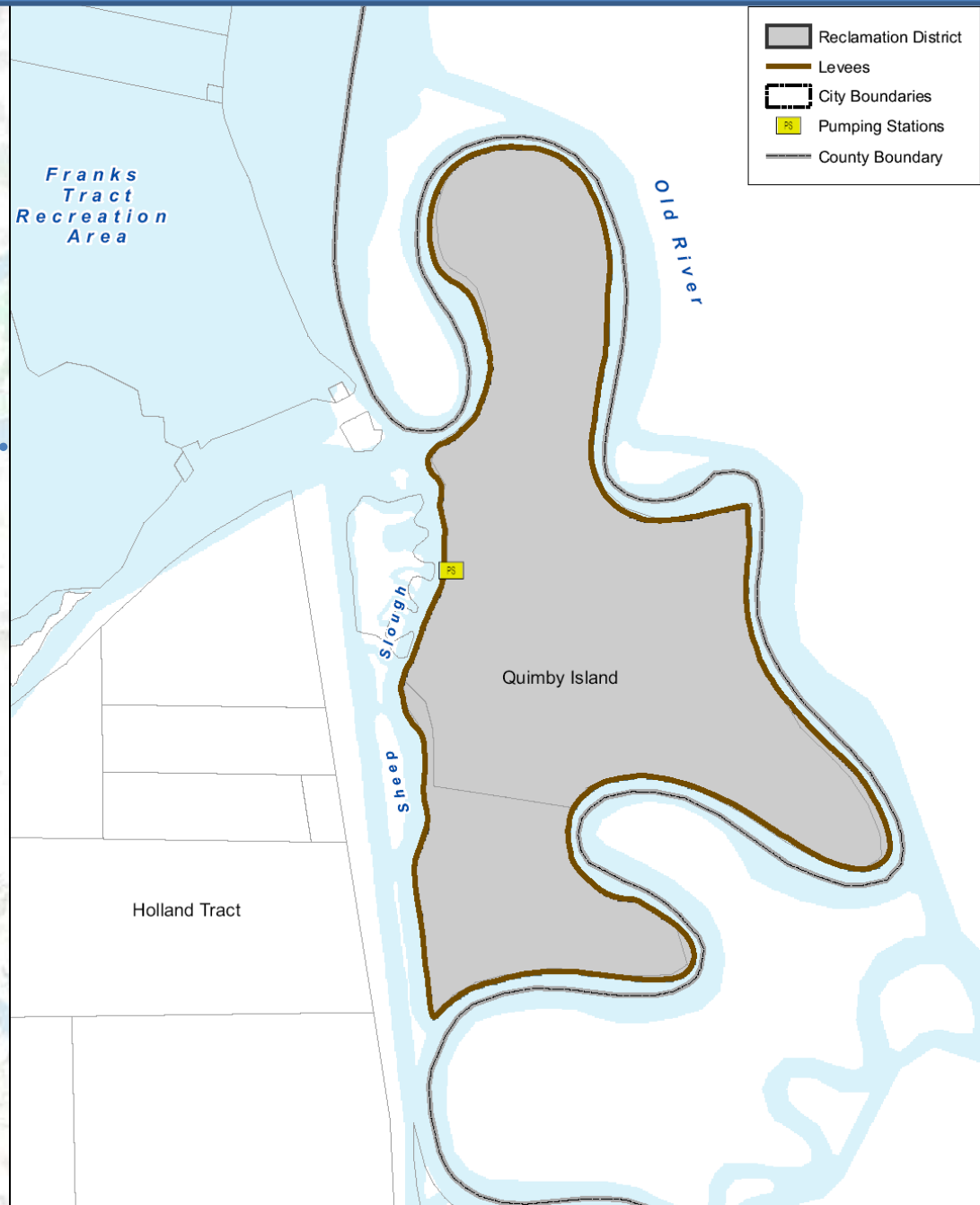
RD 2065

- ❖ Agricultural
- ❖ Levees: 5.1 mi
 - ❖ 4.2 mi. at HMP
 - ❖ 0.9 mi. below HMP
- ❖ Surface Elev.: -4 to +2 ft.
- ❖ Base Flood Elev.: 7 ft.
- ❖ Direct Staffing
- ❖ Prepares Budget? No
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? No
- ❖ Capital Planning? Yes



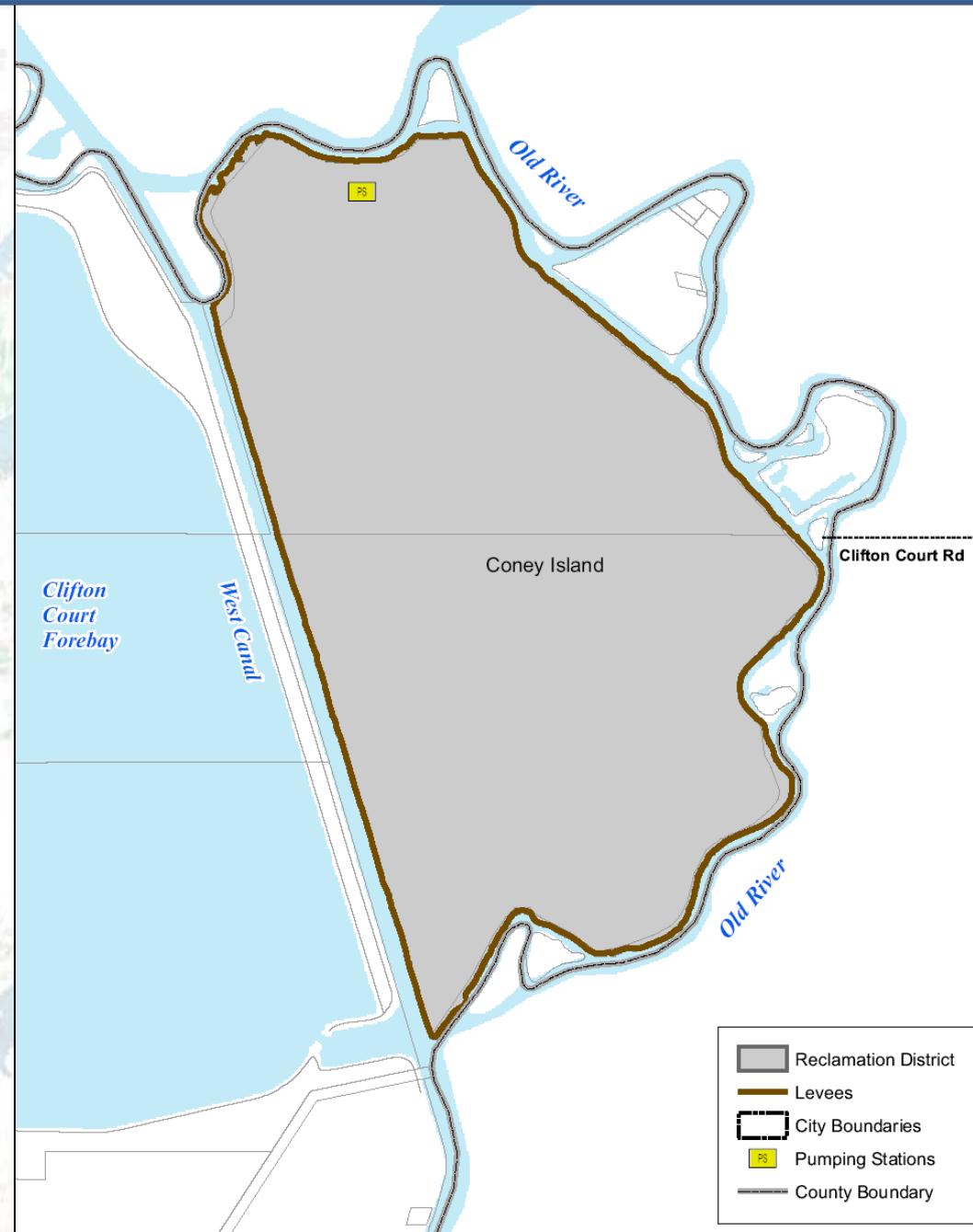
RD 2090

- ❖ Agricultural
- ❖ Levees: 7 mi.
 - ❖ 7 mi. at HMP
- ❖ Surface Elev.: -5 to -11 ft.
- ❖ Base Flood Elev.: 7 ft.
- ❖ Staffing by contract
- ❖ Prepares Budget? No
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? No
- ❖ Capital Planning? Yes



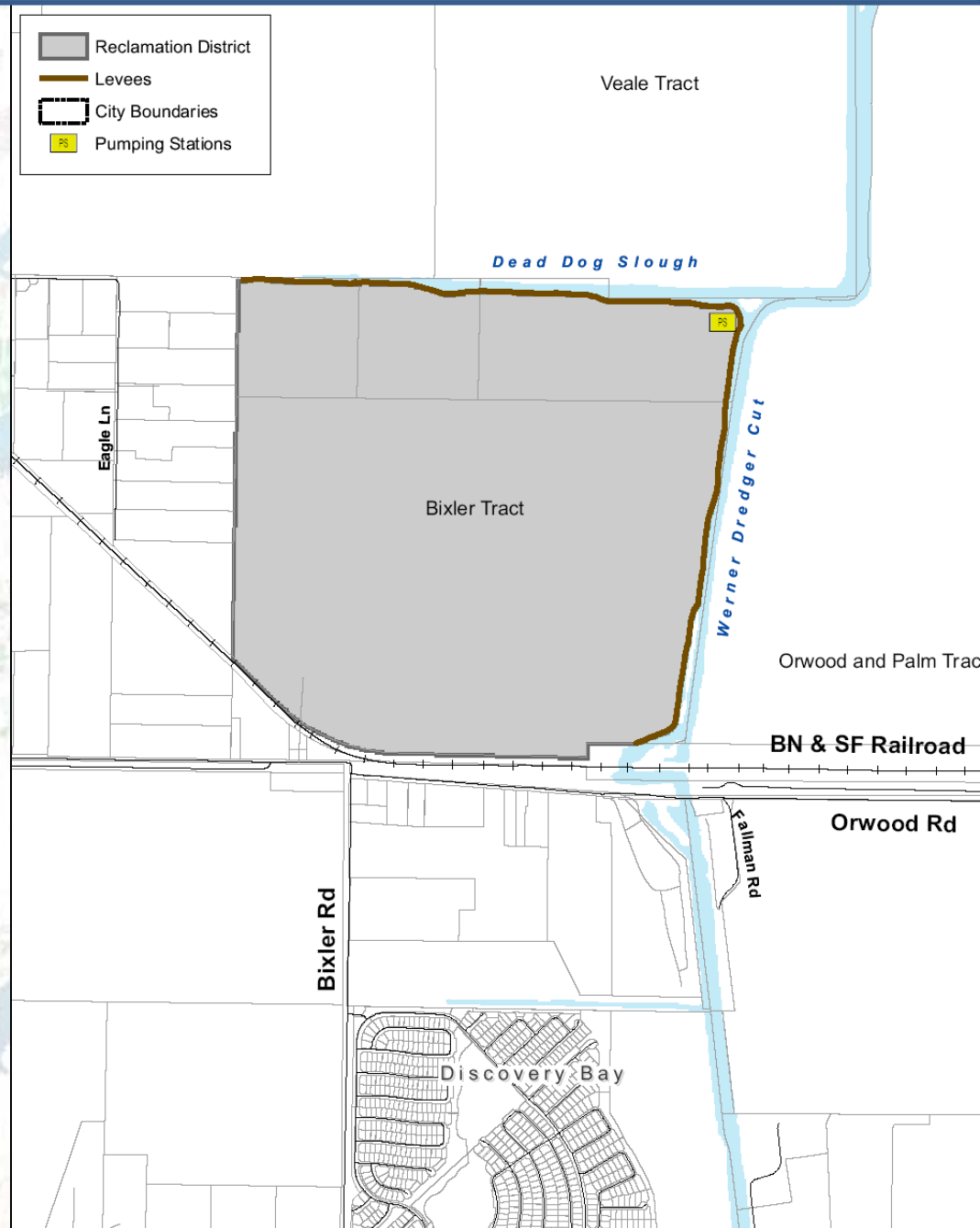
RD 2117

- ❖ Agricultural
- ❖ Levees: 5.4 mi.
 - ❖ 5.4 mi. at HMP
- ❖ Surface Elev.: -5 to -10 ft.
- ❖ Base Flood Elev.: 8 ft.
- ❖ Staffing by contract
- ❖ Prepares Budget? No
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? No
- ❖ Capital Planning? Yes



RD 2121

- ❖ Agricultural
- ❖ Levees: 2.0 mi.
 - ❖ 2.0 mi. below HMP
- ❖ Surface Elev.: -2 to +14 ft.
- ❖ Base Flood Elev.: 7 ft.
- ❖ Staffing by contract
- ❖ Prepares Budget? No
- ❖ Financial Audits? No
- ❖ Financial Records? No
- ❖ Inflation-indexed assessment? No
- ❖ Capital Planning? No



RD 2122

- ❖ Wetlands
- ❖ Levees: 5.0 mi.
 - ❖ 3.5 mi. at HMP
 - ❖ 1.5 mi. below HMP
- ❖ Surface Elev.: 0 to +10 ft.
- ❖ Base Flood Elev.: 7 ft.
- ❖ Volunteer staffing
- ❖ Prepares Budget? No
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? No
- ❖ Capital Planning? Yes



RD 2137

- ❖ Agricultural
- ❖ Levees: 6.4 mi.
 - ❖ 5.6 mi. at HMP
 - ❖ 0.8 mi. below HMP
- ❖ Surface Elev.: -10 to +10 ft.
- ❖ Base Flood Elev.: 7 ft.
- ❖ Staffing by contract
- ❖ Prepares Budget? Yes
- ❖ Financial Audits? Yes
- ❖ Financial Records? Yes
- ❖ Inflation-indexed assessment? No
- ❖ Capital Planning? Yes



State and Federal Funding Sources

- ❖ DWR provides regular funding to RDs via subventions (reimbursements for regular maintenance) and special projects (work agreements for levee improvements).
- ❖ DWR is authorized to immediately fund \$50,000 in levee work during a declared emergency for a local agency (Water Code §12994).
- ❖ FEMA requires levees meet at least HMP standard to be eligible for disaster recovery funding.
- ❖ FEMA may provide funding and resources during an emergency even if levees do not meet HMP standard.

Minimum FEMA Requirements (HMP)

- ❖ **Full compliance: All levees HMP or above**
 - ❖ RD 800 ❖ RD 2025 ❖ RD 2090
 - ❖ RD 2024 ❖ RD 2026 ❖ RD 2117
- ❖ **Partial Compliance: Some levee segments below HMP**
 - ❖ RD 799 ❖ RD 2059 ❖ RD 2122
 - ❖ RD 830 ❖ RD 2065 ❖ RD 2137
- ❖ **Non-Compliance: All levee segments below HMP**
 - ❖ RD 2121

State and Federal Funding Eligibility

- ❖ Only public entities are eligible for State/Federal funds
- ❖ In the event of a levee failure affecting privately owned, non-federal levees, landowner must contact County Office of Emergency Services (OES).
- ❖ County OES serves as lead agency for responding to levee breaks, including coordinating assistance within the County, and requesting additional assistance from mutual aid providers, DWR and FEMA.
- ❖ California Emergency Management Agency (CalEMA) Recovery Branch serves as lead agency for recovery efforts and liaison between local, state and federal agencies.



Possible Benefits of Consolidation

- ❖ Streamlining of administrative, operational and governance functions
- ❖ Realizing economies of scale, enhanced purchasing power (e.g., insurance, supplies, materials, etc.), increased efficiencies and cost savings
- ❖ Enhancing opportunity for State funding
- ❖ Standardizing (and improving) levee maintenance functions
- ❖ Enhancing effectiveness in dealing with increased regulatory constraints, lack of funding, and service and deferred maintenance challenges



Potential Barriers to Consolidation

- ❖ Not possible to share levee facilities (levees, pumps, etc.)
- ❖ Different islands/tracts face unique pressures and risks
- ❖ Larger agencies do not want to take responsibility for neighboring districts that have not properly maintained their levees.
- ❖ Many RDs have operated autonomously for many years (since the early 1900s) and have a history of independence.
- ❖ Some benefits of consolidation have already been achieved via use of common engineers and attorneys.
- ❖ Administrative costs associated with processing consolidation could outweigh the benefits.
- ❖ Financial incentives to consolidate are limited without a major state or federal “carrot” to fund new levee rehabilitation projects.



RD Accountability Criteria

- ❖ **Demonstrated ability to provide levee maintenance and rehabilitation to established standards.**
- ❖ **Reclamation efficiency (reclaimed acres per levee mile).**
- ❖ **Established protocol for response to emergencies.**
- ❖ **Adequate funding to maintain services, including contingency funds.**
- ❖ **Adequate staffing to provide for day-to-day operations.**
- ❖ **Board of Directors responsive to constituents.**



SOI Update Recommendations

SOI Update Recommendations

District	Name	Recommendation
RD 799	Hotchkiss Tract	SOI reduction in the western portion of the District, between Jersey Island Road and Little Dutch Slough, to remove parcel in the Dutch Slough Tidal Marsh Restoration Project area.
RD 800	Byron Tract	SOI expansion to include an 80-acre parcel where District provides service outside bounds, and SOI reduction in the area of a 200-acre parcel that does not receive District services.
RD 830	Jersey Island	Retain existing coterminous SOI.
RD 2024	Orwood/Palm Tracts	Retain existing coterminous SOI.
RD 2025	Holland Tract	Retain existing coterminous SOI.

SOI Update Recommendations

District	Name	Recommendation
RD 2026	Webb Tract	Retain existing coterminous SOI.
RD 2059	Bradford Island	Retain existing coterminous SOI.
RD 2065	Veale Tract	Retain existing coterminous SOI and require the District to explore expansion of SOI/ boundary to the west. RD 2065 is required to report back to LAFCO within 12 months regarding status.
RD 2090	Quimby Island	Retain existing coterminous SOI.
RD 2117	Coney Island	Retain existing coterminous SOI.
RD 2121	Bixler Tract	Zero SOI to allow for dissolution of inactive agency.
RD 2122	Winter Island	Retain existing coterminous SOI.
RD 2137		Zero SOI to allow for dissolution of District following completion of Jersey Island Road setback levee and Dutch Slough Tidal Marsh Restoration Project.

As the private landowner of a non-federal levee, what do I need to know during an emergency?

Levee inspection and maintenance is *your* responsibility. You should:

- Maintain your levees
- Have flood fighting supplies stockpiled
- Train personnel in flood fighting methodology
- Increase levee Patrols during periods of high water
- Protect and repair your levees during high water events

You know your levees better than anyone else. If you feel the flood fight has moved beyond your capabilities, that you need technical advice or assistance, or that other communities are threatened, call your county Office of Emergency Services (OES Operational Area) or your county Sherriff's Office.

The county OES will;

- Coordinate assistance within your county
- Request additional assistance from the Mutual Aid Region if necessary
- Request assistance from the Department of Water Resources

DWR will provide technical assistance and may provide flood fight assistance if it is determined there is a threat to life and property. DWR's Flood Operations Center can be reached at 916-574-2619. To avoid confusion please be sure to call your Counties OES office first. Additionally, during a state of emergency, the Corps of Engineers is authorized to provide both technical and direct assistance.

In order to receive assistance you'll need to provide:

- A point of contact and cell phone numbers of the levee owner or maintaining agency and the person most knowledgeable with the damage site.
- The location of the damage and preferably the latitude and longitude coordinates.
- A brief description of the damage

For more information:

<http://cdec.water.ca.gov/>

For real time weather, hydrology, and forecasts from DWR

<http://www.cnrfc.noaa.gov/>

For real time weather, hydrology, and forecasts from NWS

<http://www.oes.ca.gov>

For information on emergency response infrastructure and services

<http://www.dfm.water.ca.gov/pubs/pubs.cfm>

For publications from DWR including flood fighting and emergency operations guidance



US Army Corps
of Engineers
Sacramento District



March 2008

OES Guidance on Who to Call

Local Coordination

To determine the local government agencies that an LMA should work with before and during an emergency, they should call:

County Offices of Emergency Services

<p>Alameda County Office of Emergency Services 4985 Broder Boulevard Dublin, CA 94568 Ph: (925) 803-7800 Fax: (925) 803-7878</p>	<p>Alpine County Office of Emergency Services P.O. Box 278 Markleeville, CA 96120 Ph: (530) 694-2231 Fax: (530) 694-2956</p>	<p>Amador County Office of Emergency Services 700 Court Street Jackson, CA 95642 Ph: (209) 223-6384 Fax: (209) 223-1609</p>
<p>Butte County Office of Emergency Services 25 County Center Drive Oroville, CA 95965 Ph: (530) 538-7373 Fax: (530) 538-6760</p>	<p>Calaveras County Office of Emergency Services 891 Mountain Ranch Road San Andreas, CA 95249 Ph: (209) 754-6303 Fax: (209) 754-6333</p>	<p>Colusa County Office of Emergency Services 929 Bridge Street Colusa, CA 95932 Ph: (530) 458-0230 Fax: (530) 458-4697</p>
<p>Contra Costa County Office of Emergency Services 50 Glacier Drive Martinez, CA 94553 Ph: (925) 646-4461 Fax: (925) 646-1120</p>	<p>Del Norte County Office of Emergency Services 981 H Street, Suite 240 Crescent City, CA 95531 Ph: (707) 464-7255 Fax: (707) 465-1470</p>	<p>El Dorado County Office of Emergency Services 330 Fair Lane Placerville, CA 95667 Ph: (530) 621-5895 Fax: (530) 626-6814</p>
<p>Fresno County Office of Emergency Services 1221 Fulton Mall Fresno, CA 93721 Ph: (559) 445-3391 Fax: (559) 445-3299</p>	<p>Glenn County Office of Emergency Services 543 West Oak Street Willows, CA 95988 Ph: (530) 934-6442 Fax: (530) 934-6429</p>	<p>Humboldt County Office of Emergency Services 826 Fourth Street Eureka, CA 95501 Ph: (707) 268-2500 Fax: (707) 445-7764</p>



County Offices of Emergency Services (cont'd)

<p>Imperial County Office of Emergency Services 1078 Dogwood Road Heber, CA 92249 Ph: (760) 482-2400</p>	<p>Inyo County Office of Emergency Services P.O. Box 427 Independence, CA 93526 Ph: (760) 878-0292 Fax: (760) 878-2241</p>	<p>Kern County Office of Emergency Services Kern County Fire Department Charles Conner, Emergency Services Manager Ph: (661) 391-7000</p>
<p>Kings County Office of Emergency Services 280 North Campus Drive Hanford, CA 93230 Ph: (209) 582-3211 ext. 2881 Fax: (209) 582-8261</p>	<p>Lake County Office of Emergency Services P.O. Box 489 1220 Martin Street Lakeport, CA 95453 Ph: (707) 262-4090 Fax: (707) 262-4095</p>	<p>Lassen County Office of Emergency Services 220 South Lassen St, Suite 1 Susanville, CA 96130 Ph: (530) 257-6121 Fax: (530) 257-9363</p>
<p>Los Angeles County Office of Emergency Services 1275 N. Eastern Avenue Los Angeles, CA 90063 Ph: (323) 980-2261 Fax: (323) 881-6897</p>	<p>Madera County Office of Emergency Services 14143 Road 28 Madera, CA 93638 Ph: (209) 675-7792 Fax: (209) 675-8413</p>	<p>Marin County Office of Emergency Services 3501 Civic Center Dr, Rm 266 San Rafael, CA 94903-4189 Ph: (415) 499-6584 Fax: (415) 499-7450</p>
<p>Mariposa County Office of Emergency Services P.O. Box 162 Mariposa, CA 95338 Ph: (209) 966-4330 Fax: (209) 966-0252</p>	<p>Mendocino County Office of Emergency Services 501 Low Gap Road Ukiah, CA 95482 Ph: (707) 463-5667 Fax: (707) 463-5649</p>	<p>Merced County Office of Emergency Services 735 Martin Luther King Jr. Way Merced, CA 95340 Ph: (209) 385-7548 Fax: (209) 725-0174</p>

County Offices of Emergency Services (cont'd)

<p>Modoc County Office of Emergency Services 102 South Court Alturas, CA 96101 Ph: (530) 233-4416 Fax: (530) 233-4971</p>	<p>Mono County Office of Emergency Services P.O. Box 616 100 Bryant Street Bridgeport, CA 93517 Ph: (760) 932-5279 Fax: (760) 932-7435</p>	<p>Monterey County Office of Emergency Services 1322 Natividad Road Salinas, CA 93902 Ph: (831) 796-1900 Fax: (831) 796-1911</p>
<p>Napa County Office of Emergency Services 1195 Third Street, Room 310 Napa, CA 94559 Ph: (707) 253-4421 Fax: (707) 253-4176</p>	<p>Nevada County Office of Emergency Services 950 Maidu Avenue Nevada City, CA 95949 Ph: (530) 265-1515 Fax: (530) 265-7112</p>	<p>Orange County Office of Emergency Services 2644 Santiago Canyon Road Silverado, CA 92676 Ph: (714) 628-7055 Fax: (714) 628-7154</p>
<p>Placer County Office of Emergency Services 2968 Richardson Drive Auburn, CA 95603 Ph: (530) 886-5300 Fax: (530) 886-5343</p>	<p>Plumas County Office of Emergency Services 505 Lawrence Street Quincy, CA 95971 Ph: (530) 283-6332 Fax: (530) 283-0897</p>	<p>Riverside County Office of Emergency Services 4080 Lemon Street, Suite 8 P.O. Box 1412 Riverside, CA 92502-1412 Ph: (951) 955-4700 Fax: (951) 955-8940</p>
<p>Sacramento County Office of Emergency Services 711 G Street, 2nd Floor Sacramento, CA 95814 Ph: (916) 874-4670 Fax: (916) 930-9227</p>	<p>San Benito County Office of Emergency Services 471 Fourth Street Hollister, CA 95023 Ph: (831) 636-4168 Fax: (831) 636-4165</p>	<p>San Bernardino County Office of Emergency Services 1743 W. Miro Way Rialto, CA 92376 Ph: (909) 356-3998 Fax: (909) 356-3965</p>

County Offices of Emergency Services (cont'd)

<p>San Diego County Office of Emergency Services 5555 Overland Ave, Bldg 19 San Diego, CA 92123 Ph: (858) 565-3490 Fax: (858) 565-3499</p>	<p>San Francisco County Office of Emergency Services 1003A Turk Street San Francisco, CA 94102 Ph: (415) 558-2700 Fax: (415) 431-7500</p>	<p>San Joaquin County Office of Emergency Services 222 E. Weber Avenue, Courthouse, Room 610 Stockton, CA 95202 Ph: (209) 468-3962 Fax: (209) 944-9015</p>
<p>San Luis Obispo County Office of Emergency Services County Government Center San Luis Obispo, CA 93408 Ph: (805) 781-5011 Fax: (806) 781-5005</p>	<p>San Mateo County Office of Emergency Services 400 County Center Redwood City, CA 94063 Ph: (650) 363-4790 Fax: (650) 363-1868</p>	<p>Santa Barbara County Office of Emergency Services 4410 Cathedral Oaks Road Santa Barbara, CA 93110 Ph: (805) 681-5526 Fax: (805) 681-5553</p>
<p>Santa Clara County Office of Emergency Services 55 West Younger Ave, Ste 435 San Jose, CA 95110-1721 Ph: (408) 299-3751 Fax: (409) 294-4851</p>	<p>Santa Cruz County Office of Emergency Services 495 Upper Park Road Santa Cruz, CA 95065-2121 Ph: (831) 458-7150 Fax: (831) 458-7139</p>	<p>Shasta County Office of Emergency Services 1525 Court Street Redding, CA 96001 Ph: (530) 245-6059 Fax: (530) 245-6173</p>
<p>Sierra County Office of Emergency Services 101 Courthouse Square Downieville, CA 95936 Ph: (530) 289-3201 Fax: (530) 289-3620</p>	<p>Siskiyou County Office of Emergency Services 311 Lane Street Yreka, CA 96097 Ph: (530) 842-8320 Fax: (530) 842-8378</p>	<p>Solano County Office of Emergency Services 530 Clay Street Fairfield, CA 94533 Ph: (707) 784-1600 Fax: (707) 421-6383</p>

County Offices of Emergency Services (cont'd)

<p>Sonoma County Office of Emergency Services 2300 County Ctr Dr, #221-A Santa Rosa, CA 95403 Ph: (707) 565-1152 Fax: (707) 526-5555</p>	<p>Stanislaus County Office of Emergency Services 1100 H Street Modesto, CA 95353 Ph: (209) 525-4658 Fax: (209) 544-6226</p>	<p>Sutter County Office of Emergency Services 1136 Civic Center Blvd, Ste E Yuba City, CA 95993 Ph: (530) 822-7400 Fax: (530) 822-7109</p>
<p>Tehama Obispo County Office of Emergency Services 502 Oak Street Red Bluff, CA 96080 Ph: (530) 529-7900 Fax: (530) 529-7933</p>	<p>Trinity County Office of Emergency Services P.O. Box 2907 Weaverville, CA 96093 Ph: (530) 623-2500 Fax: (530) 623-2614</p>	<p>Tulare County Office of Emergency Services 5957 S. Mooney Blvd Visalia, CA 93277 Ph: (559) 737-4660 Fax: (559) 737-4693</p>
<p>Tuolumne County Office of Emergency Services 2 South Green Street Sonora, CA 95370 Ph: (209) 533-5511 Fax: (209) 533-5510</p>	<p>Ventura County Office of Emergency Services 800 South Victoria Avenue Ventura, CA 93009 Ph: (805) 654-2551 Fax: (805) 648-9258</p>	<p>Yolo County Office of Emergency Services 120 W. Main Street, Suite E Woodland, CA 95695 Ph: (530) 406-4930 Fax: (530) 661-6705</p>
<p>Yuba County Office of Emergency Services 915 Eighth Street, Suite 117 Marysville, CA 95901 Ph: (530) 749-7520 Fax: (530) 749-7524</p>		

