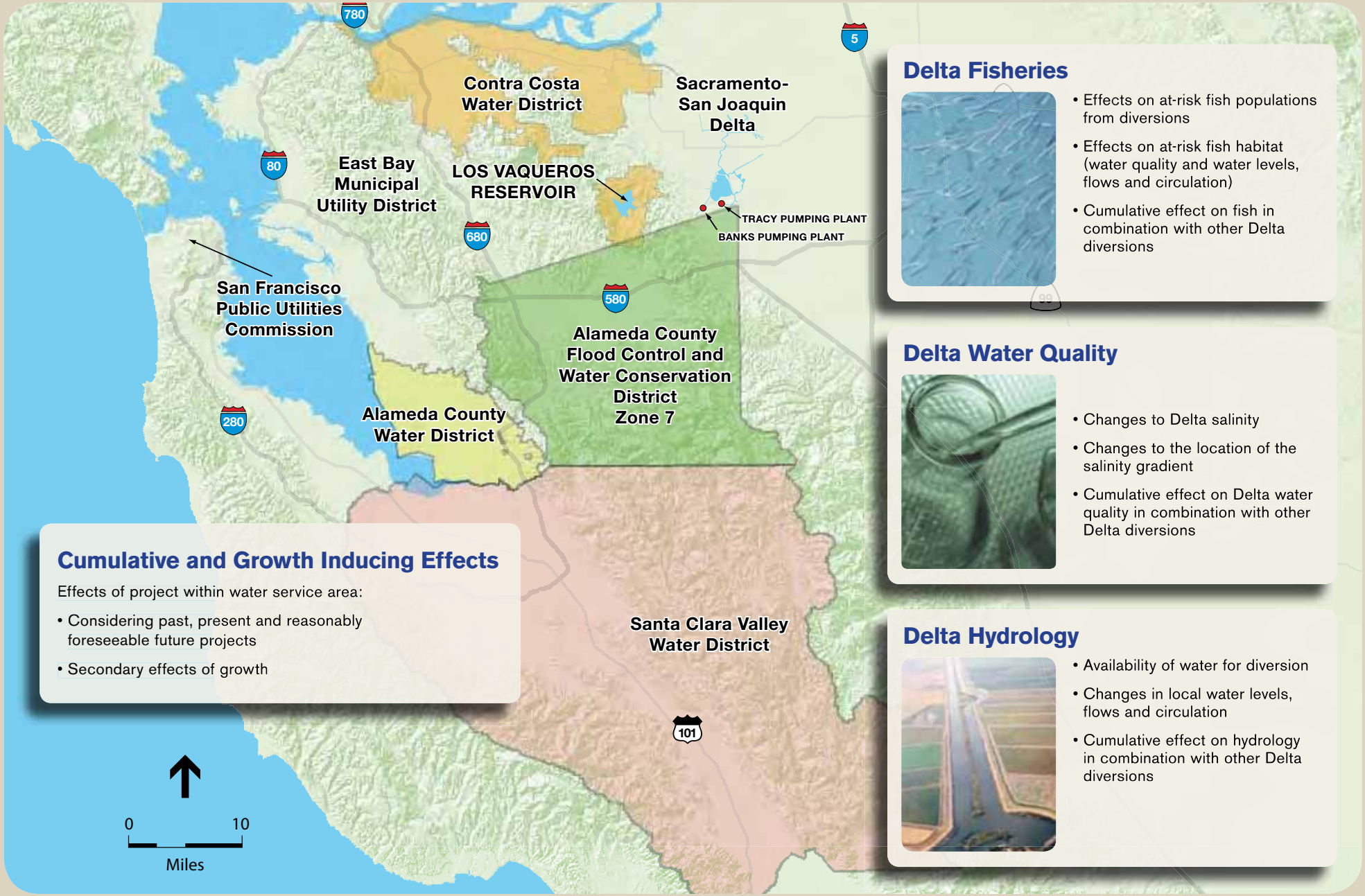
ENVIRONMENTAL ISSUES - OPERATIONS



Delta Fisheries

- Effects on at-risk fish populations from diversions
- Effects on at-risk fish habitat (water quality and water levels, flows and circulation)
- Cumulative effect on fish in combination with other Delta diversions

Delta Water Quality

- Changes to Delta salinity
- Changes to the location of the salinity gradient
- Cumulative effect on Delta water quality in combination with other Delta diversions

Delta Hydrology

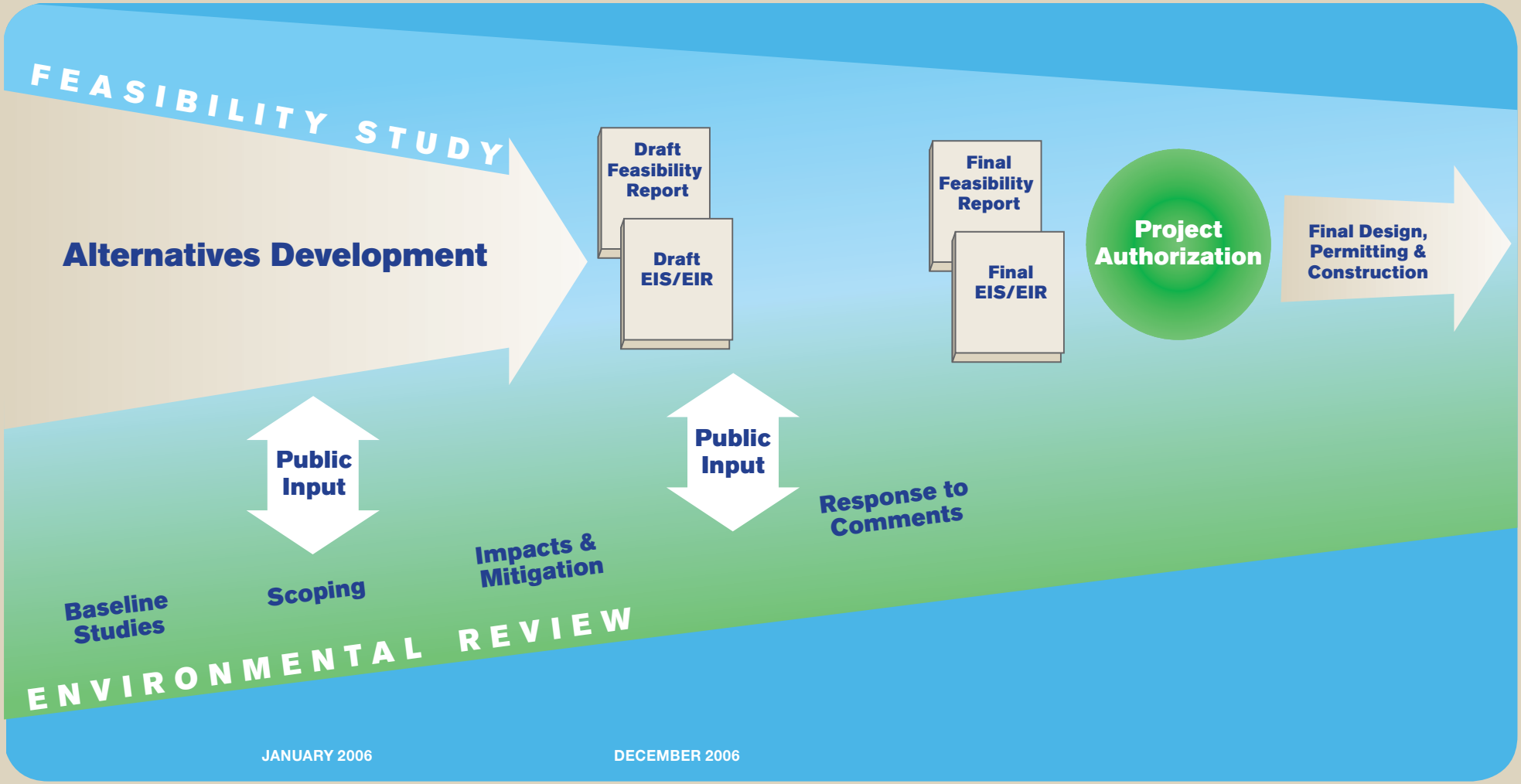
- Availability of water for diversion
- Changes in local water levels, flows and circulation
- Cumulative effect on hydrology in combination with other Delta diversions

Cumulative and Growth Inducing Effects

Effects of project within water service area:

- Considering past, present and reasonably foreseeable future projects
- Secondary effects of growth

STUDY PROCESS SCHEDULE



Appendix D-3
Public Meeting Presentation

ESA

Los Vaqueros Reservoir Expansion EIS/EIR

Public Scoping Meetings

Sacramento, January 24, 2006 (1:30 – 3:30 p.m.)

Antioch, January 24, 2006 (6:00 – 8:00 p.m.)

Livermore, January 25, 2006 (6:00 – 8:00 p.m.)

Concord, January 26, 2006 (6:00 – 8:00 p.m.)

1

Introductions

- Charles Gardiner, CirclePoint
- Marguerite Naillon, Contra Costa Water District
- Patricia Roberson, Bureau of Reclamation
- Other Team Members
  - Leslie Moulton, Environmental Science Associates
  - Steve Cimperman, CA Department of Water Resources

2

Presentation Agenda

- Welcome / Meeting Purpose
- Overview of Environmental Review
- Project Schedule
- Public Comment
  - Hear comments related to topics to address in the EIS/EIR

3

Environmental Review

- Contra Costa Water District and Bureau of Reclamation are currently evaluating if an expanded Los Vaqueros Reservoir could:
  - Provide lower cost water for the Environmental Water Account
  - Improve water supply reliability for Bay Area water users
  - Improve water quality for Bay Area water users

4

Environmental Review

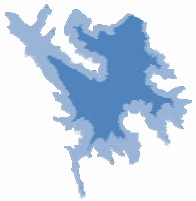
- CCWD and Reclamation will publish a joint Environmental Impact Statement / Environmental Impact Report (EIS/EIR)
- Federal Environmental Review (NEPA)
  - Lead Agency – Bureau of Reclamation
- State Environmental Review (CEQA)
  - Lead Agency – Contra Costa Water District

5

Los Vaqueros Reservoir Expansion EIS/EIR • Public Scoping Meetings

Environmental Review

- Purpose of the EIS/EIR:
  - Identify and disclose potential environmental impacts of project alternatives
  - Identify mitigation to reduce or eliminate significant environmental impacts
  - Identify a preferred alternative
  - Support preparation of federal Feasibility Report



6

Environmental Review

EIS/EIR will evaluate:

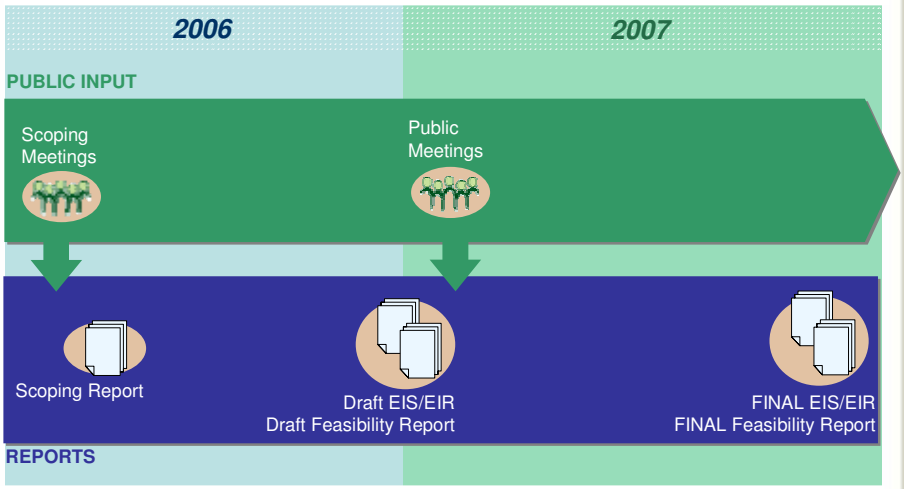
- Aesthetic Resources
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Fisheries
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise and Vibration
- Recreation
- Transportation and Circulation
- Utilities and Public Services
- Growth-Inducing and Cumulative Effects



Federal Project Review

- The Bureau of Reclamation includes the EIS with the Feasibility Report submitted to Congress
- Feasibility Report includes:
  - EIS/EIR
  - Engineering feasibility
  - Economic analysis
  - Recommended plan

Project Schedule



How To Stay Involved

- Provide comments today
- Submit written comments on scoping by 5:00 p.m. on February 28, 2006
- Contact CCWD and Reclamation with any questions
- Visit project websites for updated project information

www.lvstudies.com

www.usbr.gov/mp/vaqueros

Public Comments

- Oral and written comments will be documented in a Scoping Report
- The Scoping Report will indicate how comments will be addressed in the Draft EIS/EIR

Guidelines for Public Comment Period

- Submit a speaker card with your name and comment topics
- Facilitator will invite each speaker to the podium
- State your name and affiliation
- Respect any time limits to provide all participants an opportunity to speak

Contact Information

Please send written comments in by
5:00 p.m., Tuesday, February 28, 2006
to

Marguerite Naillon, Contra Costa Water District
P.O. Box H20 - Concord, CA 94524-2099
(925) 688-8018
fax (925) 686-2187
lvstudies@hotmail.com

or

Patricia Roberson, Bureau of Reclamation
2800 Cottage Way - Sacramento, CA 95825-1898
(916) 978-5074, TDD (916) 978-5608
fax (916) 978-5094
proberson@mp.usbr.gov

Appendix D-4
Comment and Speaker Cards

ESA

LOS VAQUEROS RESERVOIR EXPANSION EIS/EIR

COMMENT CARD

Comments may be submitted today or mailed to:

Los Vaqueros Reservoir Expansion Project
c/o Contra Costa Water District
P.O. Box H2O
Concord, CA 94524-2099

Please submit comments by 5:00 p.m. February 28, 2006

Name: _____

Affiliation: _____

Address: _____

_____

Phone: _____

E-mail: _____

Comments:

_____

_____

_____

_____

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_____

Please use the reverse side or attach any additional pages

_____

_____

_____

Place
Stamp
Here

Los Vaqueros Reservoir Expansion Project
c/o Contra Costa Water District
P.O. Box H2O
Concord, CA 94524-2099

Public Scoping Meetings

Los Vaqueros Reservoir Expansion EIS/EIR

Speaker Card

Date: January 24-26, 2006

Name: _____

Affiliation: _____

Address: _____

Phone Number: _____ **Email:** _____

Comment: _____

_____

_____

_____

Please submit your speaker card to the registration desk or meeting facilitator.
The facilitator will use the cards to invite participants to provide oral comments during the public comment period.

Public Scoping Meetings

Los Vaqueros Reservoir Expansion Project

Speaker Card

Date: January 24-26, 2006

Name: _____

Affiliation: _____

Address: _____

Phone Number: _____ **Email:** _____

Comment: _____

_____

_____

_____

Please submit your speaker card to the registration desk or meeting facilitator.
The facilitator will use the cards to invite participants to provide oral comments during the public comment period.

Appendix E
Scoping Meeting Sign-In Sheets

ESA

Los Vaqueros Reservoir Expansion EIS/EIR - Public Scoping Meetings

Concord, CA - January 26, 2006

Name/Affiliation	Address	Phone/Fax	email	How did you find out about the meeting?
Tomi Van de Broolce	CA Alliance for JOBS 2000 Powell Street #1175	510/547-9305	TomiVdB@Comcast.net Emeryville 94608	web

Los Vaqueros Reservoir Expansion EIS/EIR - Public Scoping Meetings

Concord, CA - January 26, 2006

Name/Affiliation	Address	Phone/Fax	email	How did you find out about the meeting?
N.E. Hanson	1025 Pandora Way Clayton Ca	925 672 4591	flag4wing@comcast.net	FEI
Peter Margiotta	122 Castle Crest Rd Alamo CA.	925 944-1188	PetePatsy@SBCGlobal.NET	mail
Wm E. Smith	1312 Davis Ave. Concord	682-8812		
Craig Fleming	4632-D Melody Ln. Concord 94521	825-9751	navair@earthlink.net	mail
Leslie Stewart League of Women Voters	3398 Wren Ave. Concord 94519	510-839-1608 (days) 510-839-1610 fax	leslie@lwvba-ca.org	e-mail mail
Cynthia Patty	954 Morello Ave. Martinez, CA 94553	925-381-9299	cpatty@horizon.csueastbay.edu	Contra Costa Times online article
Hartley Naas	3751 Lindero Dr Concord CA 94519	925 825 1039	HMNaas@Astound.net	mail
Ave Florance	7109 Briza Loop San Ramon 94582	925 478-8427	aflorance@horizon.csueast bay.edu	contra Costa times online article
Heather Pohl SFPUC	1145 Market St San Francisco 94103	(415) 554-1634	hpohl@sfwater.org	e-mail

Los Vaqueros Reservoir Expansion EIS/EIR - Public Scoping Meetings

Concord, CA - January 26, 2006

Name/Affiliation	Address	Phone/Fax	email	How did you find out about the meeting?
KARL SCHINDHELM HOME OWNER	2200 ROCKNE DR CONCORD CA 94518	825-5015	NONE	
Grey Whipple Home Owner	2631 Lyon Circle Concord CA 94518	(925) 687-4312	whipple@pacbell.net	CC Times
EDGAR CRUMP HOME OWNER	974 TIFFANY DR CLAYTON CA. 94517	925 672 3040		MAILED
Wayne Jarnhorst Home Owner				
Scott Hein & Claudia Hein	1886 Sagewood Ct Concord, CA 94520	925 671 0401	scott@heinphoto.com	mailer
Rebecca Johnson	4770 Willow Road Pleasanton, CA 94566	925-416-4882	rjohnson@angnewspapers.com	
ART Kroeger Home Owner	5467 Louisiana Dr Concord, CA 94521	925 686-1600	amkepaye@sbcglobal.net	Mailer
LECH NAUMOVICH CA. NATIVE PLANT SOCIETY	PO BOX 3057 BERKELEY, CA 94703	510 734 0335	CONSERVATION@EBCNPS.ORG	WORD OF MOUTH
Walter Pease City of Pittsburg	65 Civic Ave Pittsburg 94565	925 2526966	wpease@ci.pittsburg.ca.us	announcement

Los Vaqueros Reservoir Expansion EIS/EIR - Public Scoping Meetings

Concord, CA - January 26, 2006

Name/Affiliation	Address	Phone/Fax	email	How did you find out about the meeting?
Richard Soderholm	3784 Juniper	827-5678	rsoderho@astarnd.net	press for the - Post card
Tomi Van deBrooke CA Alliance for Jobs	2000 Powell Street #1175	(925) 457-6260	tomivdb@rebuildca.org	

Los Vaqueros Reservoir Expansion EIS/EIR - Public Scoping Meetings

Sacramento, CA - January 24, 2006

Name/Affiliation	Address	Phone/Fax	email	How did you find out about the meeting?
Kristi Sandberg BOR.	2800 Cottage Way	916 978-5217	KSandberg@mp.usbr.gov	
TONY CATIZZONE	10100 W. LINNE RD TRACY, CA 95377	209-836-5050 -832-2115 F	tony_catizzone@ameron.com	NEWSLETTER
AMIR RANGCHI	DWR	657-5084		E-MAIL
Jim Snow Westlands Water Dist	400 Capitol Mall Sacramento, CA	916 321 4519 321 4550	Jsnow@kmtg.com	mail
Bruce Oppenheim NOAA Fisheries	650 Capitol Mall Suite 8 Sacramento, CA	916-930-3603	bruce.oppenheim@noaa.gov	mail
Erika Kegel Reclamation	2800 Cottage Way	916-978-5081	ekegel@mp.usbr.gov	

Los Vaqueros Reservoir Expansion EIS/EIR - Public Scoping Meetings

Sacramento, CA - January 24, 2006

Name/Affiliation	Address	Phone/Fax	email	How did you find out about the meeting?
Cindy Kao SCVWD	5750 Almaden Expressway SJ CA 95118	408 265 2600	ckao@valleywater.org	
Leigh Bartoo USFWS	2800 Cottage Way Rm W-2605 Sac	916-414-6729	aondrea_bartoo@fws.com	
Vicki Frey SRCSD	10545 Armstrong Ave Mather CA 95655	916-876-6113	freyv@saccounty.net	
Thassan AlQaser	1416 9th St		galqaser@water	
Hari Rajbhandari	1416 9th St.	916 6575771	hari@wali.ca.gov	
Tom Boardman	1521 I St. Sac 95814	916 441-2249	[redacted] hydrobro@ix.netcom.com	
Robert DuVall	901 P St. Sac 95814	916 651-9680	rduvall@water.ca.gov	
Annie Parker DWR	1416 9th St.	653-3925	aparker@water.ca.gov	
Greg Young Tully & Young	3600 American River Dr. St 260 Sac CA 95864	916 668 5356	GYoung@TullyandYoung.com	

Los Vaqueros Reservoir Expansion EIS/EIR - Public Scoping Meetings

Sacramento, CA - January 24, 2006

Name/Affiliation	Address	Phone/Fax	email	How did you find out about the meeting?
Pete Jacobsen	MWD	916 650 2620	Pjacobsen@mwdh2o.com	
Dawn Sanders Koepke	McHugh's Associates 1107 9th St. Ste 701 Sacto CA 95814	916/930-1993 916/930 0580 fax	dsanders@mchughandassociates.com	email
Anna Holmes	4001 N Wilson way Stockton, Ca 95205	209-948-7163	aholmes@delta.dfg.ca.gov	
Don Rasmussen				
Dave Forkel	DW	510-6939977		

Los Vaqueros Reservoir Expansion EIS/EIR - Public Scoping Meetings

Antioch, CA - January 24, 2006

Name/Affiliation	Address	Phone/Fax	email	How did you find out about the meeting?
Michelle Blackwell Concord Resident	1306 Davis Ave Concord		gemsic@sbcglobal.net not	Direct Mail Piece
Janess Hanson Delta Group Sierra Club	431 Levee Rd Bay Point 94565	925 458-0860	janesshanson@earthlink.net	direct mail

Los Vaqueros Reservoir Expansion EIS/EIR - Public Scoping Meetings

Antioch, CA - January 24, 2006

Name/Affiliation	Address	Phone/Fax	email	How did you find out about the meeting?
BOB DORAN TOWN OF DISCOVERY BAY	4920 CABRILLO Pt DISCOVERY BA 94514	925/634-5137	DBREDBOB@SBCGLOBAL.NET	HANDOUT
R Veiderber Antioch	530 Burwood Way Antioch, CA 94509	925 779-9751		Paper
Remy Goldsmith ~~HZ~~ Rep. Ellen Tauscher	420 W. 3rd St Antioch, CA 94	925) 757-7187	remy.goldsmith@mail.house.gov	mailing

Los Vaqueros Reservoir Expansion EIS/EIR - Public Scoping Meetings

Livermore, CA - January 25, 2006

Name/Affiliation	Address	Phone/Fax	email	How did you find out about the meeting?
Kenneth Hennemann		925 846 4450	forken@ix.netcom.com	Paper
Karen Sweet	3585 Greenville Rd #2 Livermore 94550	925 371 0154 x111	ksweet@baysavers.org	Water news & list serve
JOAN STEWART FPL ENERGY	6185 INDUSTRIAL WAY LIVERMORE, CA 94550	925-245-5529	JOANIE_STEWART@FPL.COM	LOS VAQUEROS WEBSITE
→ Gene Broadman	4051 East Ave Liv. 94550	925 447-5982	gbroadman@sbcglobal.net	e-mail
Dyle Myers	538 Rachelle Ct Liv 94550		dmyers@zone7water.com	work
THOMAS NIESAR ACWD		510-668-4210	THOMAS.NIESAR@ACWD.com	MAILING.
MANUEL PEREZ	10781 MORGAN TERR RD LIVERMORE	925-443-9307		PAPER
Greg Bequette	10203 Morgan Territory Rd Livermore	9254494739	bequette1@ewnet.net	mailing

Appendix F
Transcripts of Oral Comments

ORIGINAL

REPORTER'S TRANSCRIPT OF

Los Vaqueros Reservoir Expansion EIS/EIR

Public Scoping Meetings.

Sacramento, January 24, 2006 (1:30 to 3:30 p.m.)

Reported by: Angela N. Pickert

CSR #12995

(Whereupon, the presentation portion of the meeting started at 2:20 p.m., not reported.)

Public comment from Vicki Fry, Sacramento Regional County Sanitation District, 10545 Armstrong Avenue, Suite 101, Mather, CA 95655.

MS. FRY: In reference to the study process scheduled, I was curious why it doesn't indicate when the Los Vaqueros expansion is going to be compared to the other potential water storage projects identified by CALFED as warranting further study?

MR GARDINER: Okay.

MS. FRY: I think it needs to. And if CALFED hasn't clarified when they're going to do that, how they're going to do that, I think they need to.

MR GARDINER: Okay.

Any other comments? Okay. Last chance to provide us comments.

All right. What an easy crowd. I would encourage you, again, to come by the boards, particularly the last three here that highlight the environmental topics that were on the slides Marguerite covered.

And so if you have particular environmental issues that you're concerned about, you might want to talk to team members about that, get a little more specifics, and then feel free to specify them in written comments.

So thank you very much.

(Meeting concluded at 2:30 p.m.)

CERTIFICATE OF REPORTER

I, ANGELA N. PICKERT, hereby certify that said proceedings were taken in shorthand by me, a Certified Shorthand Reporter of the State of California, and were thereafter transcribed by computer-aided transcription, and that the foregoing transcript constitutes a full, true, and correct report of said proceedings which took place.

That I am a disinterested person in the said action.

IN WITNESS WHEREOF, I have hereunto set my hand this 30th day of January, 2006.

ANGELA N. PICKERT
CSR No. 12995

ORIGINAL

REPORTER'S TRANSCRIPT OF

Los Vaqueros Reservoir Expansion EIS/EIR

Public Scoping Meetings

Antioch, January 24, 2006 (6:00 to 8:00 p.m.)

Reported by: Angela N. Pickert

CSR #12995

(Whereupon, the presentation portion of the meeting started at 6:45 p.m., not reported.)

Public comment from Janess Hanson, Delta Group of the Sierra Club, 431 Levee Road, Bay Point, CA 94565.

MS. HANSON: I'm Janess Hanson, and I live at 431 Levee Road, Bay Point, California 94565.

I'm here probably representing myself and Bay Point because I've looked at the Delta for 45 years, living right on the last street next to the Delta, but I'm also representing the Delta Group of the Sierra Club.

Our group is from Bay Point, Discovery Bay, and we drink the water that will -- is in the reservoir now. And I personally was on the first go around for about two years going to meetings before the original vote to start the feasibility study. And it almost feels like the dinosaur age because there's so many things that have changed since then, some things that have been added to the pot.

The proposal to enlarge the reservoir four or five times, diverting that much more water from the Delta, and the extra diversions that the State and Federal Government are -- already have in place or are proposing, the population explosion in California, all those things, and all the studies, all the studies from all the water agencies on every level to save the health of the Delta so

far have not worked because it's all -- the studies show it's down the tubes, you know, it's not working. All those studies, it's not working so -- and I realize it's not just the diversions, it's a whole lot of other things that are happening. But I wish that your study will -- would include some way that we could really make the Delta healthier in spite of diverting all the water from it, you know. It doesn't compute.

But one thing, in the two years of meetings that I went to, one subject that was not addressed and that has come up front and center all over the world is global warming. I don't remember hearing a thing about -- well, we know with the polar ice caps melting that the water level for the whole world is going to be higher. The salt intrusion will be going up farther. It will be stronger up into the Delta. There won't be the snow -- the snow melt. There won't be any snow to melt because the way the temperature is changing. You won't have that steady flow of melt through the year that we've always had.

So really, the minimum amount of water that's available is going to be less, and I don't see how that can help but affect the quality and quantity of the water that's available for, what, two-thirds of the state to use. And I don't see how the health -- that the Delta can stay healthy. So I'm hoping that those issues will be

addressed in your draft EIR.

MR. GARDINER: Okay. Good. Anything else?

MS. HANSON: That's it.

MR. GARDINER: Okay.

Any other comments from other guests? No? Okay. I think we're done then.

(Meeting concluded at 6:57 p.m.)

CERTIFICATE OF REPORTER

I, ANGELA N. PICKERT, hereby certify that said proceedings were taken in shorthand by me, a Certified Shorthand Reporter of the State of California, and were thereafter transcribed by computer-aided transcription, and that the foregoing transcript constitutes a full, true, and correct report of said proceedings which took place.

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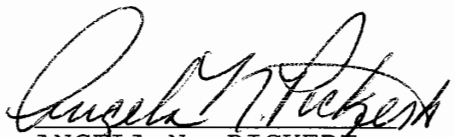


ANGELA N. PICKERT
CSR No. 12995

ORIGINAL

REPORTER'S TRANSCRIPT OF

Los Vaqueros Reservoir Expansion EIS/EIR

Public Scoping Meetings

Livermore, January 25, 2006 (6:00 to 8:00 p.m.)

Reported by: Angela N. Pickert

CSR #12995

(Whereupon, the presentation portion of the meeting started at 6:47 p.m., not reported.)

Public comment from: Karen Sweet, 3585 Greenville Road, #2, Livermore, California 94550.

Gene Broadman, 4051 East Avenue, Livermore, California 94550.

Manuel Perry, 10781 Morgan Territory Road, Livermore, California 94550.

MS. SWEET: Well, I only filled it out as a formality and not knowing, you know, what the presentation was going to be including, so I do not have a particular comment or question.

MR. GARDINER: Okay. Did you want to make a comment?

MR. BROADMAN: My name is Gene Broadman. I'm a landowner in North Livermore, and when I look at your environmental review, I would like to see a thorough economic analysis of the cost associated with this project and the potential costs of water acquisition and potential cost to the users.

MR. GARDINER: Okay. Great. Any other issues? Anyone?

MS. SWEET: May I ask in particular, what you are focusing on? In Livermore or the whole area or perhaps bringing that -- I mean, I don't mean to put --

MR. BROADMAN: It's a multiple part question. There's expansion of the reservoir itself and those costs. There's water acquisition costs, and then there's distribution costs to get it to the various users. And it would be nice to have some idea whether the whole thing makes economic sense or not.

MR. GARDINER: Okay. Anybody else want to make a comment?

MR. PERRY: I'd like to make a comment.

MR. GARDINER: Okay.

MR. PERRY: My name is Manuel Perry, 10781 Morgan Territory Road. And originally when you were getting ready to put in the facility it was the Contra Costa Water District and their users. I noticed on your Slide No. 2 it talks about Bay Area users and not Contra Costa, which leads to my next comment is, the money -- I thought the money at first or at least previously came from Contra Costa taxpayers to pay for the dam. If the Federal Government is going to get involved, who controls the water or the water usage?

MR. ROBBINS: Sir, are you a homeowner or are you a --

MR. PERRY: Homeowner.

MR. GARDINER: Any other comments?

MS. SWEET: I'd like to expand on that just a

little bit in that it raises the options to have it addressed, the ag water feasibilities bring it to the Livermore Valley, specifically.

MR. GARDINER: So consider the potential to deliver ag water to the Livermore Valley?

MS. SWEET: Yes.

MR. GARDINER: Any other thoughts?

MS. SWEET: We've been working a lot here in the Livermore Valley on ag viability and beginning to spend more time working on the range land, and so obviously, loss of grassland, if that's ag viability, and I would really like consideration for the mitigation plans for that loss and the habitat to be in consideration for local mitigation dollars to sustain the local agriculture economy.

MR. GARDINER: Loss of grassland, I assume, you mean grassland that's used for grazing?

MS. SWEET: Right.

MR. GARDINER: And for business?

MS. SWEET: Yes. But I don't think you have any land for the watershed.

MR. GARDINER: Any other things?

MR. BROADMAN: Is there any impact on Vasco Road as it goes from the Alameda County-Contra Costa County line up into the Brentwood area, and how would that be

mitigated?

MR. GARDINER: So you mean traffic, transportation impact on Vasco Road?

MR. BROADMAN: Yes.

MR. GARDINER: Okay. Great. Any thoughts on that topic? Issues?

Okay. I think we'll break. We can answer additional questions. We'll probably follow up with some of you on some additional questions that we can probably answer right now, but we'll break the formal part of this.

Thanks very much for coming. I appreciate it.

(Meeting ended at 7:02 p.m.)

CERTIFICATE OF REPORTER

I, ANGELA N. PICKERT, hereby certify that said proceedings were taken in shorthand by me, a Certified Shorthand Reporter of the State of California, and were thereafter transcribed by computer-aided transcription, and that the foregoing transcript constitutes a full, true, and correct report of said proceedings which took place.

That I am a disinterested person in the said action.

IN WITNESS WHEREOF, I have hereunto set my hand this 30th day of January, 2006.

ANGELA N. PICKERT

CSR No. 12995

ORIGINAL

LOS VAQUEROS RESERVOIR

EXPANSION EIS/EIR

PUBLIC SCOPING MEETING

---oOo---

Taken before CYNTHIA T. WALLIS

Certified Shorthand Reporter

State of California

CSR No. 12369

January 26, 2006

P R O C E E D I N G S

MR. GARDINER: Okay. We're going to start with Peter Margiotta.

MR. MARGIOTTA: Good evening. I'm here representing myself, and I'm affiliated with California Waterfowl Association and Safari Club International.

I submitted five questions in writing to you. I want you to consider the importance of the recreational value of scull-boat hunting on the enlarged reservoir and on the current reservoir and the positive effect of hunting opportunities in the delta. I think all of you will recognize that recreational activities in Contra Costa County are seriously derogated because of a lack of facilities and opportunities. And when that occurs, it further derogates the quality and life in our county. Please note that scull-boat hunting is allowed on many reservoirs and forebays which are adjacent to waterfowl hunting areas.

What will the biological impact on the Pacific waterfowl migratory be when unnatural rafting is allowed to occur on a new and larger reservoir?

Three, what will the impact on the water quality be, the salinity, when the existing reservoir

is taken out of operation and the district diverts water out of Middle River? This question obviously needs an analysis of water quality in Middle River at your anticipated point of diversion, and you should consider a variety of water-year types so it's not just an average, but also including drought years.

Number four, based on what you learn with regard to the water quality conditions in Middle River, you should consider an alternative of leaving the existing reservoir in place and changing your existing point of diversion on Old River to a new point of a diversion on Middle River. This alternative will support your ratepayers' strong position and oppose a peripheral canal.

And fifth, have your ratepayers been informed that a new and enlarged Los Vaqueros Reservoir will, in fact, facilitate the building of a peripheral canal. And if they have not been informed, how will they be informed?

Now, some people will say that's real conjecture. I think reality has it that should this reservoir not be built and you not change your point of input or taking water, and a peripheral canal or some version of a peripheral canal is built around the back of the delta, Los Vaqueros Reservoir of Contra Costa

Water District will not be able to continue drawing water where it's drawing from now. And the politics of that will facilitate the agency making a deal to put your straws in where -- into the peripheral canal making the metropolitan district very happy.

So I perceive the building of a larger reservoir not addressing the three issues, but really addressing the transporting of more water south with a lot of verbiage in terms of environmental issues being addressed in selling the project. I also feel that water foul recreation in the delta is potentially a huge economic benefit to the current -- to what is currently being done, and I'm sure everybody has seen and read about the potential levy derogation and subsidence of the islands. Well, the real clear way to prevent continued subsidence and ways to provide economic benefit to the landowners could involve enhancing the wetlands in the delta. And I tonight is not the time to get into that, but I would appreciate it if -- the opportunity to present these questions, and they then could be addressed in your scoping review.

MR. GARDINER: Could I ask you -- I will start my question about your point number three.

Was that concern that, while the existing reservoir is out of commission, your concern about

salinity, impacts the water supply?

MR. MARGIOTTA: Well, I'm concerned about just exactly what the question says. I'm concerned about the salinity that will be taken out of -- when you start drawing water out of Middle River, what happens to the water overage (sic)?

Let me see, how did I word that?

MR. GARDINER: What the impact on the water quality would be?

MR. MARGIOTTA: Correct.

MR. GARDINER: Okay.

MR. MARGIOTTA: I carefully worded that, and I'm not sure if what I just said matches the wording.

MR. GARDINER: But you're going to give us that in writing?

MR. MARGIOTTA: I'll give you that in writing.

MR. GARDINER: Okay.

Lech Naumovich.

Does anybody else want to give me a blue card?

MR. NAUMOVICH: Hi, good evening. I'm here on behalf of the California Native Plants Society, and I will give you also something in writing. And first of all, I want to specify that this will be the first of a couple of comments that we would like to give to you.

We want to, first of all, get on the record we

are very interested in this project, and we are very happy to be participating in the scoping process, in EIS and EIR. And we would like to, together, figure out how we can best work through this project. First of all, the CNPS, for those folks that don't know, California Native Plant Society, is a statewide organization of about 10,000 members, and our mission is to spare the native plant communities in California.

We have a couple of issues that we want to bring up or a couple of comments that we would like you to consider for the scoping. First of all, we want you to really consider the ecosystem level affects of what is going to happen in this project. Understandably this is a large project. I guess the estimate I got was around one- to one-and-a-half billion dollars, and we want to know and have it in writing to the EIR, A, is it economically feasible and is it environmentally feasible for what we want to do? We're concerned about the withdrawal of water from the Bay delta estuary. As everyone here in this room knows, our Bay is a very valuable resource, and withdrawing additional water from freshwater from the system is going to probably have some enormous repercussions in the Bay. It's very hard to characterize those because of the -- this manner and the complex ecological modelings.

One thing we would really like to see is some modeling that would talk to the questions of what is going to happen to salinity levels, locally drawing points and also into the Bay, where the fresh water would normally come in. And I know it's going to affect local population.

A second comment on this is, as I understand, a lot of these -- one of the main goals he indicated for this project is going to aid in fish recovery and aid in the ecosystem particularly for fish. While we think this is a noble cause, we would like you to consider whether our management for fish health is going to -- the fact that we are going to manage, specifically for fish health, is that going to have repercussions on all ecosystems?

Moving along, I just wanted to state for the record there are 92 eco-protected plants that we have listed. We would hope that all those would be considered in its process. In terms of producing a comment that's useful, we would like to see some mapping of those. In addition, we would like to see mapping over a number of years, good years and bad years for plants depending on temperature, depending on rainfall. So we would like you to really consider where there may be other populations that we may be losing. There are two plants that in

particular, calochortus pulchellus and also the thysanocarpos radians. These may be a little technical for this, but those are listed in here, and we would like special consideration for those.

The last set of comments I would want you to consider is the mitigation pressures. We understand there may be -- if the largest 5,000 -- 500,000-acre reservoir is improved, if that plan is improved, it's scheduled to inundate mitigations from the initial dam construction, and that includes a lot of valley oak planting, and a lot of community groups that have participated in this process. We wanted to make sure that, A, those mitigations are considered in addition to mitigation that will come from this project in itself. So I hope that makes sense. There are two tiers of mitigation to be considered.

In addition, we -- I think that pretty much finishes. I have a list of mitigations in this paper that I won't completely go through step by step, but, again, we wanted to thank you for inviting the Native Plant Society, and we look forward to working with you, and hopefully you can do the best job possible in this process.

MR. GARDINER: I just received another card. Tomi Van den Brooke. Just introduce yourself and your

affiliation and the comments you have.

MS. VAN DE BROOKE: Thank you.

Tomi Van de Brooke, and I'm here tonight on behalf of California Alliance for Jobs. We are a labor management partnership representing about 2,000 heavy construction firms and 50,000 workers in Northern and Central California.

We have been watching this project very closely, and we would like to request that the EIR/EIS look at issues that carefully constitutes increasing water supplies, providing assurance of water during drought and improve water quality at all times. We think that the EIR/EIS should look at providing an environmental water account through an expanded Los Vaqueros and not just the cost of providing the EWA water as stated in the project description. We think it's very important for the economic vitality of the region and look forward to seeing how the EIR comes out.

Thank you.

MR. GARDINER: Okay. Anybody else? Last chance. Anybody else want to provide us a comment on the environmental document? You're an easy crowd. Okay. We'll close the formal comment period. Again, if you have questions, come find anybody with a name tag, and we would be happy to answer the questions, and feel free

to send us written comments any time.

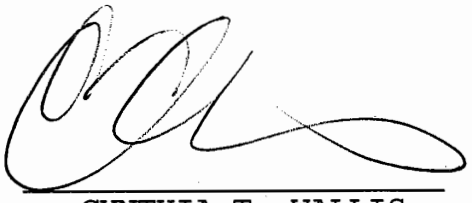
(Whereupon the proceedings were concluded at 7:13 p.m.)

CERTIFICATE OF REPORTER

I, CYNTHIA T. WALLIS, hereby certify that said proceedings were taken in shorthand by me, a Certified Shorthand Reporter of the State of California, and were thereafter transcribed by computer-aided transcription, and that the foregoing transcript constitutes a full, true and correct report of said proceedings which took place.

That I am a disinterested person in the said action.

IN WITNESS WHEREOF, I have hereunto set my hand on this date February 7, 2006.



CYNTHIA T. WALLIS
CSR No. 12369

Appendix G

Written Comments Received During Public Review Period

ESA

THE WOLF COMPANY

The Wolf Company
852 Golf Club Circle
Pleasant Hill, CA 94523
P.O. Box 5071
Walnut Creek, CA 94596
(925) 685-WOLF
FAX: (925) 798-FAXX

ARTISTIC SERVICES

DATE: 11/13/06

TO: Los Vaqueros Reservoir - Expansion Project

ATTN: Ms Marguerite Mailloux

FROM: Cllr/ Waltraud A. Heintz

MESSAGE: Re: Expansion Project

Before planning any expansion
let us carefully assess what is
good and bad about
the Los Vaqueros Reservoir -
as it exists.

Sincerely
Cllr/ W.A. Heintz

Senator John A. Nejedly, Retired
400 Montecillo Drive
Walnut Creek, California 94595
925-934-4559

February 27, 2006

Ms. Marguerete Naillon
Project Manager
Contra Costa Water District
P.O. Box H20
Concord, CA 94524

Dear Ms. Naillon:

Subject: Draft Environmental Impact Report Statement

Please accept the accompanying observations as part of the Comments on the Los Vaqueros Dam and Reservoir project E.I.R.

Thank you.

Very truly yours,

John A. Nejedly

Enclosure

DRAFT ENVIRONMENTAL IMPACT REPORT STATEMENT
LOS VAQUEROS RESERVOIR PROJECT E.I.R.

THE FOLLOWING OBSERVATIONS CONCERNING THE INITIAL ALTERNATIVES INFORMATION REPORT OF THE LOS VAQUEROS EXPANSION INVESTIGATION, CALIFORNIA, OF SEPTEMBER 2005 ARE PRESENTED FOR INCLUSION IN THE PROCEEDINGS.

First, the critical significance of the "Islands" of the Delta and their levees in this or any other Delta project must be objectively established and understood before any project in the Delta is planned.

The recent Sacramento Conference of the Water Education Foundation has provided a solid base through which that understanding can be provided. In order that the public have access to information provided by that conference, a full report upon the meeting should be included in this Expansion Project Investigation.

For the purpose of this analysis, specific points raised in the conference are here referred to. In particular, the comments of Ronald Light, U.S. Army Corps of Engineers; and Lester Snow, former Director of CalFed, a consortium of State and Federal water export agencies established to provide management of the Delta, their own activities, water export projects, and state water resources.

Mr. Snow observed that, "Delta levees were not and are not being given a priority by the State and CalFed process, levee restoration has lagged, our management system is broken, and unless the critical element of levee failures is understood and properly responded to, we're going to have disaster after disaster. Levees are a critical element of Delta planning." Mr. Light made it clear that levees will continue to fail. That failure precipitates enormous property and personal losses and expenditure of public funds and degradation of Delta water quality, to the point that those dependent upon continuing delivery cannot be provided for. In one year alone, 1997, 32 levees failed.

Levee failures, such as the Jones' Tract breach, draw salt laden estuarian waters into the Delta, limiting or terminating delivery to local and water export requirements by reason of quality degradation. That circumstance continues until quality is restored by river flows and reservoir releases. Should there be a concurrent period of drought, inadequate river flows and depleted reservoir sources will extend the period of recovery until adequate water is available.

The period of time between levee failure and restoration of Delta water quality, should quality have been diminished, depends upon the availability of public funds to establish public security and restore Delta water quality. The source of such funding must be identified, and the certainty of its availability must be established, as well as responsibility for dam failure.

Levees susceptible to failure by reason of their foundations and core material are a critical element of Delta ecology. A program for their management must be in place prior to any project dependent upon Delta quality, and absolute assurance of the certainty of the funding for levee failure must be in place before project implementation.

Except for the unfortunately under-funded Army Corps of Engineers investigations, there is no substantially well-founded information available to assist preparation of a project dependent upon Delta water quality.

The project investigation must not only fully report upon potential movements in the extensive fault planes of the Delta and how they relate to project structures, but also to their effects upon Delta water quality. That potential, of earthquakes in the seismically active Delta, has been considered only by the East Bay Municipal Utility District, but its study is limited to the "islands" providing aqueduct support. Failure of levees anywhere in the Delta can affect the entire Delta and the EBMUD aqueducts.

Limiting the investigation to levee restoration is not appropriate. A more appropriate alternative may be to simply allow flooded islands to remain flooded. However, all alternatives to resolution of the inevitable levee failures must be inventoried and response, adequately funded in advance, must be in place in order to establish future project compatibility with the plan of response to levee failures. Each "island" must be considered independently of all others, and consideration must be given to the particular circumstances of each.

An alternative to destruction of Los Vaqueros Dam is proposed. That alternative is a 25,000 A.F. additional capacity to the present Los Vaqueros Dam. During the design of the Dam, the point was raised by the Board of Consultants of the California Division of Safety of Dams that the foundation of the dam as proposed would not be adequate to support a larger dam if one were later required.

The Board suggested that a higher dam could be later constructed at the site in order to provide much more storage if changes in the design were made.

During the design of the dam it was commented that, "The District advised the Board there was no need to provide additional storage and that they were not interested in the added expense, as the project was sufficient for CCWD needs. The net result of the District's decision not to build the Los Vaqueros Reservoir Dam so that it could be raised was that the dam as now constructed cannot be raised. The core is too thin and porous material in the left abutment, combined with the design of the core, requires that the dam must be torn down before a new, higher dam can be constructed."

There is now a reevaluation of that conclusion. It is now claimed that the dam can now safely be raised to accommodate an additional 25,000 A.F. of storage without structural alteration. The circumstances that changed the opinion must be made known.

During the design for Los Vaqueros all the Bay Area agencies involved in water management, environmental protection, water quality, and CalFed were repeatedly solicited to join in the project so its capacity would be adequate to serve all needs. None indicated any interest in the project. Now it is claimed that even with a 25,000 A.F. increase in capacity it "does not appear to adequately meet the project objectives of Bay Area water quality, Bay Area water supply reliability, and Delta fisheries protection."

In the bond issue instructional material in support of the Los Vaqueros project provided by the District to the Concerned Citizens for Improved Quality Water that provided support for the initial Los Vaqueros project, the question was raised as to the reservoir capacity; i.e., was it adequate? It was a rather often repeated inquiry during the meetings.

The Committee was advised by CCWD that it was adequate and that a larger dam or storage area was not required. That point was an important issue, as it was considered that the Bureau of Reclamation C.V.P. Kellogg Reservoir was foreclosed as there was no space available for two dams and reservoirs.

Raising the present Los Vaqueros Dam without structural change is inconsistent with prior determination. If the dam is raised without changes, where will responsibility for failure lie?

Other issues requiring consideration are, what agency will construct and operate the project, and what properties owned by CCWD will be required to be conveyed to another agency and at what compensation?

An inter-tie system for Bay Area water supply agencies is now being prepared. A final program is premature until a comprehensive levee course of action is in place and funded.

Alternatives to the project are suggested. The highest and most beneficial use of the resource is domestic requirements. Allocation to that use can be increased without the project.

Substantial areas of land in the Central Valley have been rendered useless for husbandry by unregulated accumulations of agricultural toxins. Water is still delivered by contract for farming, which is now impossible. Those contracts must be terminated for failure of purpose. If unused for farming, that supply must be redirected to domestic use now in critical demand.

The delivery of the highest quality Sierra sources for crops that do not need that quality of water and can be grown in areas without irrigation while domestic requirements are turned to treated sewage. Reassignment of that source to domestic priority will provide an alternative to increased demands upon an already impoverished Delta without the project.

Further studies show that a 12% reduction in water allocations to agriculture will provide a 100% increase in domestic supply.

Long-term planning is an absolute requirement for Resource Administration. Present regulation cannot provide long-term administration.

Water management on both State and Federal levels now is provided by agencies directed by appointed officials whose tenure is limited to that of the appointing authority, which is determined at each succeeding election. Actions and decisions of the agencies are subject to judicial intervention, absence of legislative support by required legislation and funding, and rescission of critical decisions by legislation or veto of the appointing authority.

Critical, as well, is the reality that subsequent administrations appoint new officials and redetermine agency objectives and the means of securing them. Critical elements of water projects have been eliminated by subsequent administration or legislative refusal to provide funding. A case in point is the San Luis Drain planned but never provided leaving untreated agricultural wastes in the San Joaquin River.

That point raises the propriety of management by officials whose regulatory actions and plans can be set aside at the next election. For example, the recent reversal of a fundamental principal of forest regulation by the election of a president.

Another issue related to the fact that present resource control is vested in appointed officials of the state and federal water export projects whose primary interest is the fulfillment of export projects' objectives. However, for public agencies the sole responsibility is and must be serving the public interests.

The dichotomy is self-evident.

The proceedings must consider an alternate public agency secured through a representative bureau serving all interests. The potential for catastrophic events incident to Delta and Katrina levee failures is now clearly evident. Also made known, as judged by the record, is the absence of a long-term plan, preparation for, and management of Delta levee failures.

A Delta project that will affect Los Vaqueros Dam and Reservoir water quality is now proposed. Thus, the Environmental Impact Report required for this project provides an opportunity to include in the proceedings the critical need for a competent long-term public agency secured through a representative government procedure properly funded to respond to inevevitable levee failures.

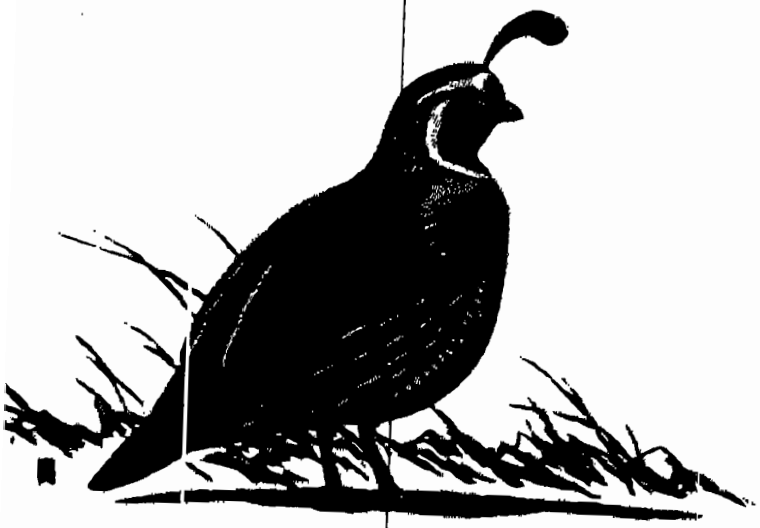
The people of California critically dependent upon access to Delta water sources were deprived of that supply in but one levee breach of relatively minor consequence until Delta quality could be restored by reservoir releases and river flows. Had there been a concurrent drought, such as that of '76-'77, the consequences could have been catastrophic.

A program for competent levee management in the public interest must be identified in the Environmental Impact Report. Therefore, public participation in this project must be as extensive as possible. Prior to the implementation of any project dependent upon Delta water quality, a long-term program for levee management must be in place and must require private funding for private benefits. Absolute assurance of project funding must be demonstrated, particularly if the present Los Vaqueros dam is proposed to be destroyed.

These considerations are requested to be made a part of the decision process.

Submitted By:

John A. Nejedly
February 27, 2006



MT. DIABLO AUDUBON SOCIETY
P. O. BOX 53
WALNUT CREEK, CALIFORNIA 94596

February 23, 2006

Ms. Marguerite Naillon, Project Manager
Contra Costa Water District
P. O. Box H20
Concord, CA 94524-2099
Fax: (925) 686-2187

RE: Los Vaqueros Reservoir Expansion Project

Dear Ms. Naillon:

Thank you for this opportunity to comment on the Notice of Preparation of the Environmental Impact Report for the Los Vaqueros Reservoir Expansion Project. On behalf of the Board of Directors and members of the Mt. Diablo Audubon Society (MDAS), I would like to express a few of our serious concerns regarding the environmental impacts of the proposed expansion.

We support the need to protect native fisheries and to provide a reliable supply of high-quality drinking water for Contra Costa Water District's customers. However, we believe that the proposed reservoir expansion and new ancillary facilities will have significant environmental impacts which cannot be adequately mitigated.

If the reservoir is expanded up to a 500,000-acre-foot facility, nearly 2,000 acres of grassland, oak woodland and wetlands will be inundated. These plant communities provide habitat for a number of special-status species, such as the San Joaquin kit fox, Alameda whipsnake, California tiger salamander, California red-legged frog, Golden eagle and other raptors. Portions of the area to be inundated are protected from such an incompatible use by perpetual conservation easements, which were required to mitigate for the environmental impacts of the initial reservoir project. To the best of our knowledge, there is no legal precedent for "breaking" these conservation easements, and we would oppose their extinguishment. Flooding these areas would also disrupt important wildlife corridors which allow seasonal movement and connect core reserves vital for foraging and reproduction. We are also concerned about the broader temporal disruption and impacts to species and habitat caused by construction of the various pipelines and other facilities contemplated by this project.

An overriding issue for MDAS is the regional impact of the placement of an even larger body of water in an area which was formerly grassland and oak woodland. New species such as Bald eagle, Osprey and various gull species are now being seen at the reservoir. We suspect that these and other new residents may have impacts on endemic species, and we anticipate that a larger reservoir would exacerbate these impacts.

Mt. Diablo Audubon Society is very interested in following the progress of the proposed reservoir expansion. Please add MDAS to your mailing list for all future documents and notices for public meetings concerning this issue. In order to expedite the information, please use the following address:

Mt. Diablo Audubon Society
Conservation Committee
1091 Walker Avenue
Walnut Creek, CA 94596

Thank you for your consideration in this matter.

Sincerely,

Michael R. Williams

Michael R. Williams
President

Cc: Ms. Patricia Roberson, Project Manager
Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825-1898
Fax: (916) 978-5094

Seth Adams
Save Mt. Diablo
1901 Olympic Blvd., Suite 220
Walnut Creek, CA 94596
Fax: (925) 947-0642

EAST BAY REGIONAL PARK DISTRICT

February 21, 2006

Mr. Greg Gartrell
Assistant General Manager
Contra Costa Water District
P.O. Box H2O
Concord, CA 94524

Subject: Scoping Comments for EIR/EIS on proposed Los Vaqueros Reservoir Expansion

Dear Greg:

Thank you for providing East Bay Regional Park District ("District") with the Notice of Preparation for the proposed Los Vaqueros Reservoir Expansion. The District has participated over the past few years in a number of customer feedback meetings conducted by CCWD and CALFED at which we have provided both verbal and written comments about the proposed reservoir expansion. In reviewing the subject NOP, it appears that relatively little has changed in the proposed project description that addresses the concerns and questions previously raised by the District.

Ours comments and concerns focus on how the proposed reservoir expansion and supporting facilities development may affect existing and proposed park and trail facilities adjacent to the Los Vaqueros Watershed. We are also concerned about project impacts to District facilities that may be affected by proposed changes to the South Bay Aqueduct System and our water-oriented recreational facilities that depend upon that system. The following is a summary of our key potential concerns that should be addressed in the Draft EIR/EIS for the proposed project:

- of existing roads, trails and other recreational facilities;
- Loss of up to 1,960 acres of open space and existing mitigation sites;
- Conflicts with the East Contra Costa Habitat Conservation Plan;
- Loss of special-status species habitats;
- Disruption of wildlife migration corridors;
- Disruption of sensitive cultural and historical resources;
- Loss of reliable water supply for water-oriented recreation at other reservoirs; and
- Water quality standard changes affecting existing water-contact recreation at other reservoirs.

Please call me at (510) 544-2622 should you have any questions regarding the attached letter.

Sincerely,

Brad Olson
Environmental Programs Manager

Attachments (2)

cc. EBRPD Board of Directors (w/out attachments)
Pat O'Brien, General Manager
Robert Doyle, Assistant General Manager
Patricia Roberson, Bureau of Reclamation

2950 Peralta Oaks Court P.O. Box 5381 Oakland, CA 94605-0381
Tel 510 635-0135 Fax 510 569-4319 Tdd 510 633-0460 www.ebparks.org

Scoping Comments on the Proposed Los Vaqueros Reservoir Expansion

February 21, 2006

The District has been acquiring and developing park and trail facilities in the vicinity of the existing Los Vaqueros Watershed for nearly three decades, starting with the 970-acre Smith property at Morgan Territory in 1975. We currently operate four regional parks adjacent to the Los Vaqueros Watershed, including the 4,547-acre Morgan Territory Regional Preserve, 1,910-acre Round Valley Regional Preserve, 1,339-acre Vasco Caves Regional Preserve and the 1,833-acre Brushy Peak Regional Preserve. With the addition of the 4,000-acre Cowell Ranch in 2003, the amount of public lands adjacent to the Los Vaqueros Watershed has effectively doubled since approval of the original Los Vaqueros Reservoir. These 13,629 acres of adjacent public lands and more than 2,000 acres of private lands under conservation easement represent a significant change in the environmental setting of the area. These changed circumstances will need thorough consideration in the EIR/EIS for the proposed reservoir expansion. We have identified the following questions and concerns that need to be addressed regarding potential impacts to these adjacent protected lands:

1. *How will a reservoir expansion affect existing and proposed recreational uses in the watershed and adjacent public lands?*

There are a number of existing public trails, which run through the watershed and adjacent areas. Some of these trails may need to be relocated due to the reservoir expansion. This includes trails that connect with Morgan Territory and Round Valley. We are concerned about the increased regulatory burden and difficulty of relocating such trails into habitat for the Alameda whipsnake, California red-legged frog, California tiger salamander and San Joaquin kit fox. It has been our experience that regulatory agencies are placing substantial restrictions on the location and permitted uses of similar trails in or near endangered species habitats. Such restrictions may include no dogs, no overnight camping or no mountain bikes in areas where such uses are presently allowed. These restrictions are difficult and expensive to enforce, and ultimately may prevent successful implementation of public access mitigation measures. They will also result in increased operating costs for the District to implement and enforce. The proposed expansion project must include provide for these essential recreational uses, fully mitigate their potential effects on biological resources and fund increased law enforcement, operational and monitoring costs.

Another significant District concern is the absence of trails that allow for mountain bicycles and equestrians within those portions of the Los Vaqueros Watershed that contribute runoff into the reservoir. CCWD previously determined not to provide for these uses due to concerns over potential impacts to water quality. We are not aware of any credible scientific research that documents these impacts or justifies exclusion of these uses within the watershed area. The existing watershed includes paved public roads and graveled non-public roads where motor vehicles routinely operate. CCWD also currently has wind turbine leases within the Watershed. Roads and turbines pose a much greater risk to water quality than bicyclists and equestrians. If the proposed reservoir expansion is to receive public funds it must allow for the full range of

public access uses within the watershed, including equestrians and bicyclists. Such uses are currently allowed within other publicly funded drinking water reservoirs, including San Pablo, Lafayette, Del Valle and Contra Loma Reservoirs. Exclusion of certain user groups based upon scientifically unfounded impacts to water quality results in other environmental impacts that may be considered significant under NEPA provisions for Environmental Justice. Such impacts must be addressed and fully mitigated in the EIS for this project.

2. *How will the reservoir expansion affect existing mitigation lands and properties subject to Conservation Easements in the watershed and adjacent protected lands?*

As part of its permit conditions for the original Los Vaqueros Reservoir, CCWD was required to place conservation easements over a few thousand acres of mitigation lands within the Los Vaqueros Watershed. CCWD has not provided mapping of these easements that would illustrate which would be impacted by the proposed expansion project. Conservation Easements are intended to be permanent deed restrictions placed on property that prevent incompatible land uses. Surely flooding, filling or grading of easement areas would be an incompatible use. Such an action would effectively extinguish the conservation values of these mitigation lands and threaten the viability of conservation easements as a valuable land conservation tool on a State-wide basis. It is also unclear if CCWD or the Bureau of Reclamation (BOR) has the legal authority to revoke or override these restrictions or to transfer these restrictions to other properties. The EIR/EIS must address this conflict between long-standing State laws and the impacts of the proposed project.

The District has acquired a number of parcels of land using mitigation funding. This includes about 700 acres at Brushy Peak, 400 acres at Vasco Caves and 480 acres at Morgan Territory that are subject to mitigation requirements and/or conservation easements. The conservation easements are held by the Department of Fish and Game, specifically for the conservation of red-legged frog, tiger salamander and kit fox. Using mitigation funding, the District has acquired significant lands which are subject to mitigation requirements and/or conservation easements. The easements are held by the Department of Fish and Game, specifically for the conservation of red-legged frog, tiger salamander and kit fox. If CCWD were successful in "breaking" conservation easements, this precedent could adversely affect the District's ability to protect these special resources in the event that another public agency wished to take District land for an incompatible purpose. The EIR/EIS must address this potential threat to other protected lands.

3. *How will the reservoir expansion affect special-status species and wildlife corridors in the watershed and adjacent public lands?*

The proposed reservoir expansion is particularly a concern for highly mobile species, such as San Joaquin kit fox, which uses and migrates across grassland habitats within and outside the watershed. Disruption of grassland habitats within the watershed may adversely affect the long-term viability of kit fox in grassland habitats outside the watershed. Such disruption would include loss of habitat by reservoir inundation and construction of reservoir facilities, plus the fragmentation and isolation of grassland habitats that result from this inundation. It appears that

an increase in the reservoir to 500,000 acre-feet would inundate an additional 1,960 acres of habitat, primarily grassland and oak savanna, both of which are used by kit fox. The western boundary of the proposed reservoir expansion may effectively sever the grassland connection that presently exists along the western side of the reservoir. With loss of this connection, kit fox habitats to the north at Round Valley effectively become isolated by the expanded reservoir foot print. This would also force more of the kit fox movement towards Vasco Road where the potential for road kill would significantly increase.

Another area of concern would be disruption of riparian corridors and seasonal drainages that act as dispersal corridors between the Los Vaqueros Watershed and protected habitats in non-watershed public lands. Red-legged frogs and tiger salamanders are both known to disperse one to two miles from breeding locations to aestivation sites or other waterbodies. There are a number of natural and constructed breeding ponds and drainages within adjacent parklands (and protected private property) that contain large populations of these native amphibians that could be impacted by the loss of migratory and dispersal corridors between District lands and habitats within the watershed. In addition, the reservoir itself provides habitat for bullfrogs and predatory fish. Expansion of the reservoir will increase habitat for these species and potential for disbursement into breeding habitats in adjacent protected land where they would prey upon red-legged frogs and tiger salamanders. The District will experience increased costs to manage our lands to identify and remove such predators. The proposed expansion project needs to fully mitigate these impacts and fund increased stewardship and operational costs.

4. *How will the proposed reservoir expansion affect the proposed preserve design for the East Contra Costa County Habitat Conservation Plan (HCP)?*

The EIR/EIS must address and fully mitigate potential adverse effects of the proposed reservoir expansion on the proposed HCP, which will likely be approved and implemented before a draft EIR/EIS for the subject project is available. There are at least two areas where there is potential conflict between the HCP and the proposed reservoir expansion. These are 1.) the HCP preserve design assumes that a viable movement corridor for kit fox will remain on the west side of the reservoir; and 2.) the acquisition of mitigation lands for the reservoir may compete with the acquisitions being conducted for the HCP. Each of these concerns is addressed below.

Kit Fox Corridor: The HCP identified four kit fox movement corridors through the HCP preserve area. These are from north to south, 1.) Sand Creek Valley; 2.) Deer Valley; 3.) Briones Valley; and 4.) Los Vaqueros Watershed, on the west side of the existing reservoir. Currently, there are major development proposals for Sand Creek Valley and Deer Valley that threatened these movement corridors. The Briones Valley is also threatened by ranchette subdivisions. This may leave the west side of the existing Los Vaqueros Reservoir as the only protected kit fox movement corridor. This corridor would also be flooded by a reservoir expansion.

Competition for mitigation lands: There is a finite supply of land suitable for mitigation in eastern Contra Costa County. CCWD's planned expansion will compete directly with

the HCP for this scarce resource. Once of the tenets of the HCP is that mitigation lands be purchased from willing sellers, whereas there is currently no such requirement for the proposed reservoir expansion. CCWD exercised its power of eminent domain in acquiring significant portions of the existing Los Vaqueros Watershed. Condemnations often result in settlements or jury awards which substantially exceed fair market value. The net effect of this competition will be to drive land prices higher, making it considerably more difficult for the HCP to achieve its acquisition goals.

5. *How will the reservoir expansion affect sensitive cultural and historical resources in the watershed and adjacent public lands?*

The District has a number of sensitive cultural and historical resources within parklands adjacent to the watershed. These include Morgan Territory, Round Valley, Vasco Caves and Brushy Peak. The later two preserves being particularly important for their spectacular rock outcrops, rock petroglyphs, bedrock mortors and burial sites. Vasco Caves was originally acquired to a large degree to protect these sensitive cultural resources from vandalism and theft as a mitigation measure for the original reservoir project. The proposed reservoir expansion would likely bring watershed visitors within closer proximity to these sensitive resources, subjecting them to increased risk of vandalism and theft. Accordingly, there will be an increased need for security, in the form of signage, fencing and police patrols. There will also be an increased need for public education to protect these areas. The proposed expansion project needs to fully mitigate and fund these increased security and operational costs.

6. *How will proposed changes in the operation of Los Vaqueros Reservoir affect other existing reservoirs that are part of the South Bay Aqueduct System?*

As you are aware, the District has a number of other water-oriented recreation facilities that are dependent upon a regular supply of surface water from the South Bay Aqueduct. These include the 4,311-acre Del Valle State Recreation Area, 266-acre Shadow Cliffs Regional Recreation Area and potential District management of Bethany Reservoir State Recreation Area.

We currently operate Del Valle Recreation Area on behalf of the Department of Parks and Recreation. This is the District's largest and most popular water-contact reservoir, with an annual visitation in excess of 500,000 people. This reservoir is dependent upon the South Bay Aqueduct as its primary source of fresh water. Any change in the operation of this reservoir as a result of changes in the operation of the SBA could have significant impacts to swimming, fishing and boating at Del Valle Reservoir. This potentially significant effect must be addressed and fully mitigated in the EIR/EIS.

Downstream from Del Valle Reservoir are the District's Camp Arroyo and Shadow Cliffs Recreation Areas. These facilities are dependent upon water releases from Del Valle Reservoir to provide adequate flows and water supply for fishing, swimming and boating, as permitted. Project-related changes to operation of Del Valle Reservoir could adversely affect these facilities. This potentially significant effect must be addressed and fully mitigated in the EIR/EIS.

7. *How will proposed delivery of Los Vaqueros Reservoir water to the South Bay Aqueduct System affect water quality standards at existing reservoirs?*

Recent District experiences at Contra Loma Reservoir and other locations have demonstrated that changes in water quality standards based upon changes in reservoir operations can have an adverse impact on water-contact recreation, especially swimming and wind surfing. We are concerned that should there be a tie in between Los Vaqueros Reservoir and other existing reservoirs in the South Bay Aqueduct System, there may be changes in the water quality standards that adversely affect existing water contact recreation at Del Valle and Bethany Reservoir, and potentially at Camp Arroyo and Shadow Cliffs. This potentially significant effect must be addressed and fully mitigated in the EIR/EIS.

8. *How would construction of either the Los Vaqueros-South Bay Aqueduct Gravity Pipeline or the Los Vaqueros-South Bay Aqueduct Pump Station and Pipeline avoid impacts to Vasco Caves and Brushy Peak?*

It appears from Figure 2 in the NOP that the proposed pipeline routes from Los Vaqueros to the South Bay Aqueduct would cross through or adjacent to Vasco Caves Regional Preserve, Brushy Peak Regional Preserve, or other private mitigation lands north of Vasco Caves or east of Vasco Road. As previously noted, these two District preserves contain a number of sensitive natural and cultural resources that could be adversely affected by a pipeline project. In addition, large portions of these preserves are also subject to conservation easements, which prohibit the construction of pipelines. Without more specific information on the proposed routing of these pipelines, it is not possible to precisely determine what, if any, types of impacts could occur. The EIR/EIS should provide more specific information and detailed mapping of proposed pipeline routes so that the impacts of proposed pipelines can be identified and fully mitigated. Additional pipeline routes must also be considered in the EIR/EIS that avoid protected public and private lands in the area.

9. *Will CCWD, BOR or CALFED consider the development of trails and other recreational facilities along proposed pipeline corridors?*

The NOP doesn't address new recreational opportunities that can be provided with development of new or expanded pipeline corridors. The proposed pipeline from Los Vaqueros to the South Bay Aqueduct could present a good opportunity to develop a multi-use regional trail within the proposed right-of-way. Expansion of the Old River pumping plant and pipeline corridor to Los Vaqueros is another opportunity to provide for a trail from the Delta to Los Vaqueros. Some of these examples may be one way to mitigate the loss of existing trail connections in other areas.

10. *Will the proposed reservoir expansion accomplish its stated project objectives if there are significant levee failures in the Delta?*

Recent studies have shown that the Delta levees are in very poor condition and may not

withstand a major earthquake or the effects of sea level rise. Failure of levees will adversely affect Delta water quality by allowing salt water intrusion, and increase turbidity and contamination from flooded Delta islands. The EIR/EIS should address the potential for levee failure to adversely affect the existing and expanded reservoir water supply reliability and water quality goals. Accordingly, the EIR/EIS should evaluate a number of project alternatives that focus instead upon Delta levee repairs and water conservation measures instead of a reservoir expansion. Given recent flooding events in the southeastern United States, it would appear prudent for Delta levee repairs to be accomplished before there is any further consideration of expensive reservoir expansions that may not be able to accomplish their stated objectives due to Delta levee failures. These questions should be addressed in the economic impact analysis section of the EIS.

As discussed above, increasing the number of lanes on Vasco Road will increase the existing barrier and hazard to wildlife movement across the entire southeastern portion of the inventory area. Approximately doubling the road width will reduce the effectiveness of the wildlife tunnels and reduce the ability of wildlife to cross the road safely.

4.3.4 Effects of Activities in HCP/NCCP Preserves

In almost all cases, activities within the Preserve System are designed to enhance and augment covered communities, wetlands, and streams. Overall, any detrimental effects on these land-cover types are expected to be negligible relative to the benefits of the conservation strategy. Construction of limited recreational facilities (e.g., trails, parking areas) and management facilities (e.g., field offices, access roads) is expected to have a total footprint within the Preserve System of no more than 50 acres. Much of this footprint would occur on land already disturbed, and would have negligible effects on natural land cover.

4.4 Effects on Covered Species

This section describes the potential direct and indirect effects on covered species under the Plan. The major direct effects will result from habitat loss associated with urban development. Because this Plan utilizes a habitat-based approach, the determination of direct and indirect effects on covered species is based on the habitat disturbed for each species. Table 3-10 and the species profiles (Appendix D) provide additional information on specific biological needs for each covered species. Examples of overlays of habitat models with the permit area are shown in Figures 4-1 through 4-4. Impacts are described below for each taxonomic group. Estimates of impacts on covered species with habitat models are provided in Tables 4-4 and 4-5 under the initial and maximum urban development areas, respectively.

4.4.1 Mammals

Two mammals are covered by the Plan: Townsend's western big-eared bat and San Joaquin kit fox. Few recent sightings of the bat have been reported, and there are no published records of Townsend's western big-eared bat within Contra Costa County. However, the species likely roosts in the inventory area in suitable abandoned mines, abandoned buildings, and caves. At least two mines exist in the inventory area (Black Diamond Mines and mines within Antioch adjacent to Black Diamond Mines Regional Park), but it is unknown if Townsend's western big-eared bat occurs in them. Covered activities are not anticipated to directly affect these habitat features. However, if abandoned mines are incorporated into the Preserve System, mine stabilization may be needed for

safety; stabilization measures may result in take of Townsend's western big-eared bat is this species occupies those sites. Similarly, stabilization of old buildings in the Preserve System occupied by bats may result in direct or indirect impacts to this species. Indirect impacts (Table 4-1), such as increased harassment or disturbance due to overall population growth or recreation within the preserves, may affect small numbers of individual bats that roost in buildings, bridges, or other structures within the inventory area. Although habitat for this species was not modeled, the loss of up to 4,363 acres of annual grassland and 263 acres of wetlands and wetland complexes would reduce available foraging habitat for this species.

Within the inventory area, core habitat for San Joaquin kit fox is defined as annual grassland, alkali grassland, and oak savanna contiguous with grassland. Secondary foraging habitat occurs in agricultural fields and row crops. Because habitat fragmentation is a significant threat to kit fox, preservation of contiguous habitat is of primary importance. Ideally, contiguous habitat would be preserved that is wide enough to serve both as local foraging and breeding habitat (i.e., support one or more kit fox home ranges) and as regional movement habitat. The inventory area represents the northernmost extension of the species' range, so maintaining connectivity to Alameda County to the south is critical to maintaining the species in the inventory area. Within the inventory area, four major movement routes, trending northwest-southeast, are thought to link known occurrences in Black Diamond Mines Regional Park to the portions of its range in southern Contra Costa County (see Figure 5-5 and further discussion in Chapter 5). The southward expansion of Pittsburg and Brentwood would affect small portions of core habitat for kit fox, while growth of Byron and infill in Brentwood would affect small portions of habitat defined as low use in the HCP/NCCP model. The expansion of the Byron Airport would affect core habitat for this species. The westward expansion of Pittsburg would affect areas modeled as core habitat for kit fox, but this area may be outside the species' range. Overall, approximately 5,000 acres of core kit fox habitat have the potential to be affected by covered activities under the maximum urban development area relative to a total of approximately 64,000 acres of habitat throughout the inventory area (less than 8%) (Tables 4-4 and 4-5; Figure 4-1).

Although not a covered activity, the expansion of Antioch to the south has the potential to significantly impair a primary movement route through the Sand Creek and Lone Tree Valleys. The expansion of the Los Vaqueros Reservoir will also eliminate core habitat for this species and reduce movement routes. These impacts are discussed in Section 4.6, *Cumulative Impacts*.

Numerous indirect effects resulting from human population growth and increased urbanization have the potential to affect kit fox along the urban-wildland interface (Table 4-1). The Vasco Road Widening project will remove core habitat for kit fox and has the potential to substantially reduce its movement from Alameda County into Contra Costa County. Recreational use on HCP/NCCP preserves that support active kit fox home ranges will be prohibited or limited to avoid or minimize adverse impacts on the species. Increased risk of fire

California Regional Water Quality Control Board
Central Valley Region
Robert Schneider, Chair

Alan C. Lloyd, Ph.D.
Agency Secretary

Arnold Schwarzenegger
Governor

Sacramento Main Office
11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
Phone (916) 464-3291 • FAX (916) 464-4645
http://www.waterboards.ca.gov/centralvalley

27 February 2006

Ms. Marguerite Naillon, Project manager
Contra Costa Water District
Post Office H2O
Concord, CA 94250

COMMENTS ON THE NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR THE LOS VAQUEROS RESERVOIR EXPANSION PROJECT, CONTRA COSTA COUNTY

Thank you for the opportunity to provide comments on your proposal to construct additional screened intakes at Old River, a new Sacramento-San Joaquin Delta (Delta) pump station, pipelines to connect the current and new Delta intakes to the new Delta pump station, a pipeline to deliver water from the Delta pump station to the expanded reservoir, a dam modification or replacement, and reservoir expansion.

Our comments are provided regarding the potential impacts on dissolved oxygen (DO) in the Delta and regulatory requirements for the proposed alternatives. The EIR will need to address the potential DO impacts for all proposed activities within the Delta and the regulatory requirements for the proposed activities.

DISSOLVED OXYGEN BACKGROUND

Several water bodies within the boundaries of the Delta have been included on the State Water Board's CWA Section 303(d) list as impaired due to low DO conditions. In January 2005, the Central Valley Water Board adopted *Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control Program for Factors Contributing to the Dissolved Oxygen Impairment in the Stockton Deep Water Ship Channel* (DO Control Program). In November 2005, the State Water Board approved the DO Control Program with minor modifications. The DO Control Program identifies reduced San Joaquin River flow through the San Joaquin River Deep Water Ship Channel (DWSC) as a major contributor to the DO impairment. It also recommends to agencies responsible for existing and future water resources facilities, which impact or have the potential to impact flow through the DWSC, that they evaluate and reduce their impacts on the DO impairment in the DWSC.

In 2002 the State Water Board adopted a revised 303(d) list of impaired water bodies. This list included DO impairments on Old River and Middle River within the Delta. Although the Central Valley Water Board has not yet developed control programs for these impairments, the EIR will need to evaluate and mitigate the potential impacts of the proposed alternatives on these water bodies.

REGULATORY REQUIREMENTS

CWA Section 401 Water Quality Certification
Any project that involves dredge or fill in waters of the US will require a CWA Section 404 permit from the U.S. Army Corps of Engineers. As part of this process, the Regional Water Board must issue a CWA Section 401 Certification that the proposed project will meet applicable water quality standards. To support a Water Quality Certification, the EIR would need to address the DO related comments above as well as other water quality issues. For dredging operations, the material to be dredged must be adequately characterized and the information on the disposal locations disclosed. More information may be found at www.waterboards.ca.gov/centralvalley/programs/wqcert/401cert-overview.pdf.

NPDES General Permit for Storm Water Discharges Associated with Construction Activities, NPDES No. CAS000002, Order No. 99-08-DWQ
Any project that involves activities where clearing, grading, disturbances to the ground, such as stockpiling or excavation results in land disturbance of one or more acres or pose a threat to water quality will require coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activities. Construction activity that involves soil disturbance on sites of less than one acre but is part of a larger common plan of development must also permit coverage. More information may be found at www.waterboards.ca.gov/stormwtr/construction.html.

If there are any questions regarding the dissolved oxygen comments, please contact Les Grober by e-mail at lgrober@waterboards.ca.gov or by phone at 916-464-4851. If there are any questions regarding the regulatory requirement comments, please contact Sue McConnell by phone at 916-464-4798 or by e-mail at smcconnell@waterboards.ca.gov.

William J. Marshall

WILLIAM J. MARSHALL
Chief, Storm Water Section

(11)

STATE OF CALIFORNIA—THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

DELTA PROTECTION COMMISSION
14215 RIVER ROAD
P.O. BOX 530
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February 24, 2006

Marguerite Naillon
Contra Costa Water District
P.O. Box H20
Concord, California 94524-2099

Subject: Notice of Preparation (NOP) for the Los Vaqueros Reservoir Expansion Project (SCH #2006012037)

Dear Ms Naillon:

The staff of the Delta Protection Commission (Commission) has reviewed the subject NOP dated January 10, 2006. From the information provided, a determination has been made that components of the proposed project would be located in the Secondary Zone of the Legal Delta. Therefore, actions for approval or denial are not subject to appeal to the Commission. However, any potential impacts to the resources of the Primary Zone of the Legal Delta resulting from activities in the Secondary Zone and outside of the Delta should be identified and analyzed pursuant to the requirements of the California Environmental Quality Act (CEQA). Therefore, the following comments are provided for consideration during the environmental review and project approval process.

The Delta Protection Act (Act) was enacted in 1992 in recognition of the increasing threats to the resources of the Primary Zone of the Delta from urban and suburban encroachment having the potential to impact agriculture, wildlife habitat, and recreation uses. Pursuant to the Act, a Land Use and Resource Management Plan (Management Plan) for the Primary Zone was completed and adopted by the Commission in 1995 (updated in 2002).

The Management Plan sets out findings, policies, and recommendations resulting from background studies in the areas of environment, utilities and infrastructure, land use, agriculture, water, recreation and access, levees, and marine patrol/boater education/safety programs. As mandated by the Act, the policies of the Management Plan are incorporated in the General Plans of local entities having jurisdiction within the Primary Zone, including Contra Costa County. The Act and Management Plan are available at the Commission's website, www.delta.ca.gov. Sections of the Management Plan that are applicable to this proposal include: Utilities and Infrastructure (Policy 1); Land Use (Policy 3 and Recommendation 5); Water (Policies 1 and 3 and Recommendations 2, 3, 6, 7, and 8); Recreation and Access (Recommendations 3 and 6).

In addition, there are several general areas that should be covered in the CEQA analysis for this project.

- It should be demonstrated that the quality and quantity of water available for Delta water users would not be significantly impacted;
- Potential cumulative impacts of additional pumping from Delta channels, given other pumping related projects and known proposals, should be taken into consideration; and
- Potential impacts of new pumps, pumping stations, and pipelines proposed as a part of the project to be located in the Secondary Zone, having the potential to impact the Primary Zone, should be analyzed.

Thank you for the opportunity to provide some input into the scoping process for this project. Please continue to send me information on the project as the review process progresses. You may contact me at (916) 776-2291 or loridpc@citlink.net if you have any questions about the Commission or the contents of this letter.

Sincerely,

Lori Clamurro
Environmental Scientist

cc: Scott Morgan, State Clearinghouse

February 28, 2006

Katherine Osborn
2437 Piedmont Ave. # 109
Berkeley, CA 94704

Marguerite Naillon
Contra Costa Water district
P.O. Box H20
Concord, C 94524-2099

By FAX: 925 686-2187

RE: Comments on the Notice of Preparation for Los Vaqueros Reservoir Expansion Project

Dear Ms. Naillon

Thank you for the opportunity to review the Notice of Preparation for Los Vaqueros Reservoir Expansion Project. I have the following comments.

- It is important that the EIS/EIR prepared by CCWD and the USBR reiterate and continue the environmental commitments made by CCWD and the USBR through certification of the 1993 Los Vaqueros Project EIS/EIR and through adoption of CCWD Board Resolution 88-45. In particular, the CCWD Board commitment to mitigate all adverse environmental effects to a level of insignificance. The environmental analysis for Los Vaqueros Reservoir Expansion should tier from the 1993 Los Vaqueros Project EIS/EIR.

- Mitigation for the Los Vaqueros Project included the construction of wetland, riparian, and oak woodland habitat areas. These in-kind mitigation areas were constructed within the Kellogg Creek watershed and will likely be inundated and destroyed with Los Vaqueros Reservoir Expansion. The environmental issues to be addressed in the EIS/EIR should include the impacts of the alternatives on existing mitigation areas and the feasibility of and additional requirements for in-kind, within watershed mitigation for sensitive species and habitat.

- The environmental issues to be addressed in the EIS/EIR should include the adverse effects on Delta fisheries due to operation of the USBR/CCWD pumping facilities at Old River, Mallard Slough, and Rock Slough. Operational data at the screened Old River pumping facility, the unscreened Mallard Slough pumping facility, and the unscreened Rock Slough pumping facility could be used for this analysis.

Sincerely,

Katherine Osborn

Katherine Osborn

save MOUNT DIABLO

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Website:
www.savemountdiablo.org

February 28, 2006

Ms. Marguerite Naillon, Project Manager
Contra Costa Water District
P.O. Box H20
Concord, CA 94524-2099

Subject: Scoping comments for concerning the Los Vaqueros Reservoir Expansion

Dear Marguerite,

Thank you for providing Save Mount Diablo (SMD) with the opportunity to respond to the notice of preparation for the Los Vaqueros reservoir expansion Environmental Impact Report (EIR). SMD is a 7000 member non-profit conservation organization, which acquires land, for addition to parks on and around Mt. Diablo, and monitors land use planning which might affect those parks.

SMD has been involved in the plans for the proposed expansion for since the project was proposed. There are several issues we believe should be considered during any evaluation of the project. The following are a list of some of our concerns about the project:

1) Biological Impacts for communities, invasive species, and special status organisms
2) Population Growth the expansion of the reservoir may induce
3) Legal Issues/Precedent set by the elimination of a conservation easement
4) Recreational Impacts to regional trails and their use
5) Construction and the problems it creates for residents and wildlife in the area
6) Traffic and impacts on local roadways created by the projects expansion

Feel Free to contact me at the address and number listed above if you have any questions regarding our comments.

Sincerely,

Seth Adams
Director of Land Programs
Save Mount Diablo

1) Biological: The Los Vaqueros Reservoir expansion will inundate several thousand acres of open space in eastern Contra Costa County. The majority of this land is grassland habitat, with some oak woodland, riparian woodland, wetlands, and chaparral. Several biological studies have been done for the watershed, included in the EIR for the creation of the reservoir in the early 1990s, and leading up to the proposal for expansion. A number of sensitive animal species inhabit the watershed or use it as a migration corridor. These species include but are not limited to: California tiger salamander, California red legged frog, burrowing owl, peregrine falcon, San Joaquin kit fox, vernal pool fairy shrimp, alameda whipsnake, and golden eagle.

According to the EIR for the original Los Vaqueros project (7-9) from 1993, 25 special status species have been reported within 5 miles of the project area with potential to occur onsite. In addition to the special status plant species, the natural community of oak woodland occurs in Los Vaqueros. Due to loss of most of its suitable habitat in the Sacramento and Northern San Joaquin this community's continued existence in California is threatened. The EIR should consider the impacts the reservoir expansion will have and what mitigations may be appropriate.

The expansion of the reservoir may increase the numbers of invasive and non-native species. Several migrating and non-native bird species were attracted by the creation of the reservoir and their numbers may increase with expansion. Some predatory fish and non-native bullfrogs present in the reservoir may be able to expand their range and enter the drainage areas for Marsh Creek and other local watersheds, threatening the existence of several endemic species.

--SMD is especially concerned about the precedent of loss of mitigation lands and projects for thje proposed expansion
--We do not believe that the District or regulatory agencies should be contemplating mitigation within the watershed, since it served as mitigation for the first project.
--we believe that new open space lands should be acquired if any project moves forward, and that these open space lands should be local to the project.
--the EIR should include evaluate mitigations from the first project to see whether they have been beneficial or not.
--the EIR should evaluate whether the health of Delta ecology will be sustained or harmed by the project.

2) Population Growth: The expansion of the Los Vaqueros reservoir may have the affect of inducing greater population growth in eastern Alameda and Contra Costa counties. With the increase in water availability in the area, this could increase growth substantially, reducing benefits for current residents.

--the EIR should include analysis as to whether the project will induce growth.

3) Legal Issues/Precedent. A potentially critical impact of the proposed Los Vaqueros expansion would be the elimination of conservation easements placed over resource lands within the watershed. There is no precedent for the proposed action. If a public agency is allowed to eliminate a conservation easement without appropriate compensatory mitigation, this could place a number of properties protected by such easements in danger and remove an important tool for private organizations and public agencies seeking to protect and preserve land.

--apparently CCWD has failed to encumber with conservation easements all the lands required for mitigation in the first project. If this is true, what is the reason for the delay? Is it appropriate to delay mitigation to this extent?

3) Recreational Impacts: One of the goals sought by the EBRPD, SMD, the State Park, and other organizations is the creation of a multi-use Diablo Regional Trail and Diablo Grand Loop Trail that passes through the protected areas of central and eastern Contra Costa County. The Grand Loop/Diablo Trail currently passes through the watershed from Morgan Territory to Round

Valley, the Diablo Trail is intended to eventually follow a route south through the watershed to Brushy Peak Regional Preserve but has been so far stymied by the District's opposition to multi-use trails (bikes and horses) about the reservoir dam.

The expansion of the reservoir will threaten these trail linkages and may require the alteration or elimination of certain sections of the trail. The loss of these recreational benefits should be studied and will need mitigation—how will trail use continue uninterrupted, for example. Other recreational facilities also exist at the reservoir. The construction would necessitate their removal and possible reconstruction elsewhere. This would curtail use of the reservoir by residents for some time and the structural and temporal impacts should be considered.

5) Construction: The expansion plan would require years of construction to take place in the Los Vaqueros area including the removal of the current dam and the construction of a pipeline to carry water from the Delta to the enlarged reservoir, with attendant traffic and construction impacts in a rural/open space environment. The noise, dust and glare created by the project should be evaluated in any EIR for the project.

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ALAMEDA COUNTY WATER DISTRICT
SANTA CLARA VALLEY WATER DISTRICT
ZONE 7 WATER AGENCY

February 28, 2006

Ms. Marguerite Naillon
Project Manager
Contra Costa Water District
P.O. Box H20
Concord, CA 94524

Ms. Patricia Roberson
Project Manager
U.S. Bureau of Reclamation
2800 Cottage Lane
Sacramento, CA 95825

Dear Ms. Naillon and Ms. Roberson:

Subject: Comments on the Notice of Intent and Notice of Preparation for the Los Vaqueros Reservoir Expansion Project EIR/EIS

Thank you for the opportunity to comment on the Notice of Preparation (NOP) and Notice of Intent (NOI) for the Los Vaqueros Reservoir Expansion Project EIR/EIS. As you know, Alameda County Water District (ACWD), Santa Clara Valley Water District (SCVWD) and Zone 7 Water Agency (collectively known as the "South Bay Aqueduct Contractors" or "SBA Contractors") rely on deliveries of State Water Project (SWP) supplies via the South Bay Aqueduct (SBA) to deliver up to 220,000 acre-feet per year to our service areas in Alameda and Santa Clara Counties. This water is treated at our respective water treatment plants prior to distribution for potable use. In addition, a portion of our SWP supplies are also used for local groundwater recharge operations.

As documented in the NOP/NOI, a key component of the proposed Los Vaqueros Reservoir Expansion Project ("Project") is a connection between the Los Vaqueros Reservoir and the South Bay Aqueduct. The NOP/NOI indicates that this connection will be required to deliver water from the expanded Los Vaqueros Reservoir to Bay Area water users. Given the importance of the SBA in delivering SWP supplies to our agencies, and given that the Project would (1) include a new connection to the SBA and (2) introduce water from a new source (i.e the expanded Los Vaqueros Reservoir) into the SBA, the EIR/EIS should address potential effects of the Project on the South Bay Aqueduct and our SWP water supplies. The evaluation of Project effects should include both construction-related activities as well as the subsequent operation of the proposed Project. Specific items that should be evaluated in the EIR/EIS are listed below.

1. Water quality – The EIR/EIS should evaluate any potential changes to water quality in the South Bay Aqueduct as a result of the Project. Constituents to be evaluated should include: bromide, TOC, TDS, turbidity, pH, dissolved oxygen, taste and odor, algae, alkalinity, and temperature. This evaluation should include seasonal changes, as well as changes under a wide range of hydrologic conditions (i.e. critical, dry, below normal, above normal and wet conditions).

2. Water treatment – The EIR/EIS should evaluate the effects that the changed SBA water quality may have on our ability to treat water from the SBA at each of our water treatment plants. Any potential changes in treated water quality, production capacity, and/or treatment costs as a result of the Project should be evaluated. Both ACWD and Zone 7 have conducted preliminary assessments of the Project in terms of impacts to treatment costs at their treatment plants. These assessments were previously transmitted to CCWD and should be considered in the EIR/EIS evaluation.

3. Conveyance capacity – Each of our agencies relies on contracted capacity of the SBA to deliver SWP supplies to our service areas. This capacity is critical to meeting service area demands, especially during peak summer months. The EIR/EIS should evaluate any potential effects that the Project may have on the daily, monthly and annual delivery capacity of the SBA.

4. Water supply reliability – Based on the material provided in the NOP/NOI it is not clear whether the Project would affect the water supply reliability of our SWP supplies in the event that one or more of our agencies chooses not to participate in the Project. The EIR/EIS should evaluate any potential effects that the Project may have on water supply reliability under a wide range of hydrologic conditions (i.e. critical, dry, below normal, above normal and wet conditions) assuming that one or more of our agencies do not participate in the Project.

5. Operations, maintenance and power needs – The EIR/EIS should evaluate the effects that the Project may have on SBA operations, maintenance and power needs and costs.

6. Del Valle Reservoir – The Del Valle Reservoir is part of the State Water Project and operates as a regulatory reservoir for the operation of the South Bay Aqueduct. During some periods of the year water from the SBA is stored in Del Valle Reservoir for later release back into the SBA. In addition, Del Valle also provides storage for ACWD and Zone 7 for local supplies. The EIR/EIS should evaluate any potential effects that the Project may have on existing and planned SWP operations at Del Valle as well as any effects on water quality in the reservoir. The EIR/EIS should also evaluate any potential effects of the Project on ACWD's and Zone 7's use of the reservoir for storage of local supplies.

7. Aquatic species and habitat – Currently, raw water from the SBA is introduced into local watersheds from a variety of mechanisms, including SBA releases to Del Valle Reservoir, releases to local arroyos in the Zone 7 service area for groundwater recharge, releases to creeks within Santa Clara County, and releases into Alameda Creek (via the Vallecitos Turnout) for subsequent ACWD groundwater percolation. Given that the Project would introduce a new source of supply into the SBA, the EIR/EIS should evaluate any potential impacts that this new source of supply may have on habitat and aquatic species in local watersheds.

8. Seismic reliability –The temporary loss of the SBA as a result of a seismic failure may result in significant water supply shortages in our service areas. Given that the Project will construct new conveyance facilities and connection to the SBA, the EIR/EIS should evaluate the potential effects that these new facilities would have on the seismic reliability and potential for outages as a result of a major earthquake in the Bay Area.

9. Delivery reliability – The SBA is subject to periodic planned and unplanned outages for maintenance and other needs. While our agencies can typically accommodate infrequent and short term planned outages, any increase in the frequency and/or duration of outages may have significant impacts on our water supply operations. The EIR/EIS should evaluate the potential for planned and unplanned outages of the SBA that may occur as a result of the Project.

Contra Costa Water District and the USBR should coordinate closely with the DWR (State Water Project Analysis Office) and each of the SBA Contractors in the evaluation of these potential Project effects. Coordination with our agencies will also be critical in establishing the appropriate criteria for the determination of the level of significance of adverse impacts. The EIR/EIS should also include commitments to sufficient mitigation and monitoring such that any resulting adverse impacts to the SBA and our water supplies are less than significant.

We look forward to continue working with CCWD and the USBR on this Project, and would like to thank you again for the opportunity to comment on the NOP/NOI.

Sincerely,

Paul Piraino
General Manager
Alameda County Water District

Stanley M. Williams
CEO
Santa Clara Valley Water District

Dale Myers
General Manager
Zone 7 Water Agency

ec
By e-mail
cc: Steve Cimperman, Department of Water Resources
Terry Erlewine, State Water Contractors

STATE OF CALIFORNIA, RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEB SITE conservation.ca.gov

February 27, 2006

Ms. Marguerite Naillon
Los Vaqueros Reservoir Expansion Project Manager
Contra Costa Water District
P.O. Box H20
Concord CA 94250

Subject: Notice of Preparation (NOP) for the Los Vaqueros Reservoir Expansion Draft Environmental Impact Statement/Report, Contra Costa County

Dear Ms. Naillon:

The Department of Conservation's Division of Land Resource Protection (Division) monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act, California Farmland Conservancy Program, and other agricultural land conservation programs.

Contra Costa Water District and the U.S. Bureau of Reclamation are acting jointly as lead agencies under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) in preparation of a draft environmental impact report/statement (DEIR/S) for the expansion of the Los Vaqueros Reservoir. This project is included in the California Bay Delta program's long-term planning documents. The objectives of the proposed project involve improving water supplies for environmental programs such as the Environmental Water Account program, increasing water supply reliability by increasing the capacity of the reservoir, and improving water quality. The current reservoir facility consists of a storage reservoir behind a 200-foot high dam, over 18 miles of pipeline, and two pump stations. The expanded reservoir would be operated similarly to the existing reservoir, however, additional screened intakes, a new pump station, and additional pipelines would be constructed.

We offer the following comments, and respectfully ask that our concerns be addressed in the DEIR/S:

The NOP indicates that the expansion project could potentially affect agricultural resources. We ask that the DEIR/S provide a detailed discussion of whether any agricultural lands would be acquired and if termination of Williamson Act contracts

would result in order to accommodate the proposed project. It should also further discuss whether such Williamson Act contract termination would affect any nearby agricultural acreages, as well as those properties under contract. If any part of the project's site is under Williamson Act contract, and any part of the project site is to continue under contract after project completion, the document should discuss the proposed uses for those lands. Uses of contracted land must meet compatibility standards identified in Government Code Sections 51238 - 51238.3; otherwise, contract termination (see paragraph above) must occur prior to the initiation of the project.

We respectfully request that the Division's Land Evaluation Site Assessment model be utilized to determine significance of impact resulting from conversion of agricultural resources to other uses. The model and instructions is available on the Department's website at www.conservation.ca.gov. (Click on the Division of Land Resource Protection link, followed by the link at the right of the screen for the LESA model.) We would be pleased to assist the lead agencies in its use.

Please note that any acquisition of contracted land by a public agency must meet the requirements set forth in Government Code sections 51290 to 51295. Specific findings would need to be reported to the Department of Conservation in the required notice to the Director. The requirements for findings may be waived under Government Code section 15993 (h).

Thank you for the opportunity to review this document. We look forward to reviewing the DEIR/S. Please contact Jeannie Blakeslee at (916) 323-4943 if you have any questions regarding these comments.

Sincerely,

Dennis J. O'Bryant
Acting Assistant Director

TOWN OF DISCOVERY BAY CSD

1800 Willow Lake Road, Discovery Bay, CA 94514
Telephone: (925) 634-1131 Fax: (925) 513-2705

February 16, 2006

Ms. Marguerite Naillon, Project Manager
Contra Costa Water District
P.O. Box H20
Concord, CA 94250

RE: Town of Discovery Bay, Community Services District (CSD) Comments on the Notice of Preparation (NOP) for an Environmental Impact Report (EIR) on the Proposed Los Vaqueros Reservoir Expansion Project

Dear Ms. Naillon:

The Board of Directors of the Town of Discovery Bay CSD at its regular meeting on Wednesday, January 18, 2006 discussed the Notice of Preparation (NOP) for an Environmental Impact Report (EIR) on the Proposed Los Vaqueros Reservoir Expansion Project and has the following comments:

1. On page 8 of the NOP, under "Required Facilities – Delta Intakes", the total intake for your proposed project is five to seven times more than what is currently being pumped today. This may alter the flow of our effluent from our wastewater discharge pipeline, which is about 400-500 feet south of Contra Costa Water District's (CCWD) Old River pump station. The Town is extremely concerned about the possible effect of alteration of the flow that your project may have on our diffuser pipe. The possible effect will need to be analyzed thoroughly, and any potential need for alteration of, or work on, the Town's diffuser will need to be discussed, with an emphasis on the source of financing, if any.
2. The Town of Discovery Bay CSD Board would like to know the location(s) of the proposed "Delta Pump Station".
3. Under "Delta-Los Vaqueros (Delta-LV) Pipeline" which talks about either a single or double parallel pipeline(s), of which may be constructed next to CCWD's existing intake pipeline, you should be aware that this may become an issue for the Town for two (2) reasons. One would be that the driveway to access the Town's wastewater treatment facility needs to be accessible 24-hours a day. The second would be the construction of this very long pipeline(s) will have an impact on the residents of Discovery Bay because of the dust, noise, and delays or detours for a few years with no benefit to our 15,000 +/- residents.

4. The Town feels that the egress and ingress of the construction equipment and their material suppliers will have a major impact to the users of Highway 4 and some of the other narrow roads, which may cause vehicle accidents along with the mud and dust on the roads and in our homes.
5. Most of Discovery Bay is surrounded by a levee, which is meant to help protect our 5,300 +/- homes from flooding and has a total appraised value of about $2-3 billion. It is also possible that either the current reservoir or the new proposed reservoir when built may cause a major impact to the Byron, Brentwood, and Discovery Bay communities. If either the current or proposed reservoir were to somehow fail, causing widespread flooding from the landside, these same levees will prevent the floodwaters from returning to the delta. These levees are designed to hold back the waters of the Delta but not water from the landside. Prolonged flooding from the landside would weaken these levees to a point where they could fail during periods of high tides and high water in the river. These communities need to have and be part of a community wide emergency evacuation plan. We would look to CCWD to insist that the County work these plans into the County Emergency Plan.
6. The current Los Vaqueros Watershed Recreational Facilities is accessible with little or no fees by CCWD's customers and with a fee by all other non-CCWD customers. Since Brentwood residents are a customer of CCWD, and Byron and Discovery Bay are not, and the residents of these two communities are the ones being impacted by the years of construction, noise, dust and traffic delays, we would like to suggest that the residents of Zip-code 94513 & 94514 be allowed to access the Los Vaqueros Watershed Recreational Facilities with no fees.
7. On page 12 of the NOP, it outlines a "Comparison" chart of total acreage, but there is nothing mentioned about the total number of additional cubic feet of fill that will be needed to either construct a 300,000-acre-foot or a 500,000-acre-foot reservoir. Also needed are where this fill is coming from, and the volume that is needed.
8. In this NOP, it does not seem to describe where the source of the electrical power is coming from for the proposed pump station, or where the route would be for the electrical power poles / towers.
9. On the south side of the intersection of Discovery Bay Boulevard and Highway 4, is an existing CCWD pipeline structure. We believe this structure is used as an air-relief device. Looking towards the future, it seems that if Discovery Bay was to extend Discovery Bay Boulevard to the South, this concrete structure would be in the way. With the new proposed pipeline, we would prefer that there be no pipeline above ground structures built in this area.

We would like to ask that these concerns of the Town be addressed by the project's EIS/EIR document. Should you have any questions on these items, please contact Virgil Koehne the District's General Manager at (925) 634-1131.

Sincerely,

Robert Doran, Board President
Town of Discovery Bay CSD

VK/ca

COMMENTS TO CALFED ON THE PROPOSED EXPANSION OF THE LOS VAQUEROS RESERVOIR,

January 24, 2006

My comments today are focused on the impacts on the Vasco Caves, but I want to be clear that this by no means is the only impact the expansion of the Los Vaqueros Reservoir (LVR) would have on the areas biological and cultural resources. I have just chosen to comment on the most flagrant and measurable destructive consequence the enlargement of LVR will have.

I have been visiting the Vasco Caves since 1987 when they first found me and it was soon after that I began appearing before the board of the Contra Costa Water District (CCWD) to express my opposition to the construction of the original Los Vaqueros Reservoir. Even though I failed in having any success in stopping the project, I feel my relationship with the board over the years helped shape the discussion about preservation of the caves and its resources.

I watched during the construction of LVR, California's largest remaining stand of Valley Oaks get turned into mountains of firewood along with the nearly one dozen golden eagles nests that stood proudly within them. The list of endangered and threatened species that lost critical habitat is staggering. The largest and most intact habitats for the kit fox, red legged frog, tiger salamander, and numerous other plants and animals was lost forever with the creation of LVR.

The way that the CCWD was able to get around these "significant losses" was with the use of Habitat Conservation Plans (HCP's), which are an unproven theory that says habitat can be recreated somewhere else. My contention is that the majority of Los Vaqueros' HCP's have failed. I have seen for myself the decline of the animal and plant species that were supposed to be protected at all costs with CCWD mitigations. And now CALFED proposes to flood these habitats set aside as mitigation to the losses incurred by the construction of the original LVR. How is CALFED going to mitigate these losses?

The specific loss I am choosing to comment on concerns Vasco Caves western most outcrops that under the current plan would be inundated by the construction of the enlarged Los Vaqueros Reservoir. I have written to CALFED numerous times and have appeared before the CCWD board with this specific concern and I have come away with the understanding that they were not even aware of this loss. I have also yet to hear any response to my concern.

The rock outcrops I speak of are easily found as they are the only ones found in the Kellog creek watershed (hence their inundation) and fall outside the Vasco Cave Regional Preserve. The fact that a lot of people are not aware of them because they are not part of the Preserve does not mean that they are not significant. They are extremely sacred and have numerous archeological resources including midden and rock art sites.

There are also all the protected species that are found at the other parts of the Vasco Caves.

So I would like the record to show that I have brought up the fact that the enlargement of LVR would destroy a large portion of Vasco Caves and that CALFED and the CCWD has failed to answer any of my previous comments, questions, and concerns about this fact and that I have failed to find anywhere in the documentation any mention of this loss.

Thank you for you time and consideration.

Sincerely,

John E. Negrete
347 Nile Street, #4
Nevada City, CA 95959
(530)559-3857
johnnegrete@hotmail.com

LOS VAQUEROS RESERVOIR EXPANSION EIS/EIR

COMMENT CARD

Comments may be submitted today or mailed to:

Los Vaqueros Reservoir Expansion Project
c/o Contra Costa Water District
P.O. Box H20
Concord, CA 94524-2099

***Please submit comments by 5:00 p.m. February 28, 2006**

Name: Bill Bennett

Affiliation: DWR

Address: 901 Pst.
Sacramento CA

Phone: 916 651-7051

E-mail: bennett @ water.ca.gov.

Comments:

The Alternative of not raising Los Vaqueros Dam but building the pipeline/canal intertie to Bethany and the SWP should be evaluated. This would provide possible EWA benefits w/o extensive dam reformulation costs.

Please use the reverse side or attach any additional pages

Peter Margiotta
122 Castle Crest Rd.
Alamo, California 94507
Telephone 925-944-1188

January 26, 2006

Ladies/Gentlemen:

Re; Scoping Issues for the Enlarged Los Vaqueros Reservoir Project

1. Consider the importance of the recreational value of scull-boat hunting on the enlarged reservoir and its positive effects on hunting opportunities in the Delta. Please note that scull-boat hunting is allowed on many reservoirs and forebays, which are adjacent to waterfowl hunting areas.

2. What will be the biological impact on the pacific waterfowl migratory species be when unnatural rafting is allowed to occur on this new larger reservoir.

3. What will be the impact on water quality (salinity) when the existing reservoir is taken out of operation and the district diverts water out of Middle River? This question obviously need an analysis of water quality in Middle River at you anticipated point of diversion and you should consider a variety of water-year types.

4. Based on what you learn with regard to water quality conditions in Middle River, you should consider an alternative of leaving the existing reservoir in place and changing your existing point of diversion on Old River to a new point of diversion on Middle River. This alternative will support your ratepayers' strong position in opposition to a peripheral canal.

5. Have your ratepayers' been informed that a new enlarged Los Vaqueros Reservoir will facilitate the building of a peripheral canal, and if not how will [redacted]? they

Thank you in advance for considering and analyzing these issues.

Sincerely,

Peter Margiotta

California Native Plant Society

East Bay Chapter
P O Box 5597, Elmwood Station
Berkeley, CA 94705

January 26, 2006

CALFED Los Vaqueros Reservoir Expansion Studies
PO Box H2O
Concord, CA 94524
(925) 688-8018

Re: Notice of Preparation for an Environmental Impact Report and Statement for the Los Vaqueros Reservoir Expansion Project

Dear CALFED Los Vaqueros Reservoir Expansion Project Study Team:

The California Native Plant Society thanks the US Bureau of Reclamation and the Contra Costa Water District for the opportunity to comment upon the Scoping for the EIS/EIR on the proposed expansion of the Los Vaqueros Reservoir. CNPS is a statewide organization of some 10,000 members whose mission is to conserve and protect the native plant species and native plant communities in California. The Society's mission is to increase the understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education, and conservation.

The following letter lists some preliminary concerns of the East Bay Chapter of the California Native Plant Society regarding the Reservoir Expansion Project (REP) of the Los Vaqueros dam. The following comments are by no means exhaustive, but rather considerations that should be addressed in the corresponding environmental reports. Pursuant to the mission of protecting California's native flora and vegetation, CNPS submits the following comments for the scoping process:

- First and foremost, knowing that this expansion project will irreversibly alter the ecological function of approximately 2,000 acres of land, the study needs to prove that the expansion of the dam is the **only** viable option for achieving the goals listed by the Contra Costa Water District (CCWD). CNPS holds that any major water diversion project has enormous implications to the entire San Francisco Bay/Delta/Estuary ecosystem. Any major water diversion project will affect this entire system from the Suisun Marsh, the largest contiguous freshwater marsh in the US, to the estuarine wetlands around the Bay which are dependent on the flushing action of water from upstream sources. The south end of the Bay is particularly vulnerable to the loss of freshwater flows because it receives so little freshwater flow from the immediate area, hence its high salinity. Water quality issues for the entire system are crucial, and the EIR/S must address cumulative impacts from all freshwater diversion, not just the local impacts to the delta. Hydrologic modeling would provide viable answers to the change in salinity, flow patterns and other important water quality issues. In addition to water issues, construction disturbance greatly affects native plant populations in so many ways that are terribly difficult to mitigate effectively. Alternatives need to be considered

exhaustively for maintaining the assurance promulgated by the CCWD Board of Directors for the REP that reads; *1) provide long-term environmental benefits to the Delta ecosystem,* and *2) enhance the terrestrial habitat and recreational opportunities.*

- Another critical factor in the scoping process is to ensure, that the EIS and EIR will satisfy state and federal requirements concerning plant species of concern. Appendix 1: CEQA-Protected Rare and Unusual Plants of Los Vaqueros, indicates that 92 species of concern need to be addressed in this document in order for it to be valid and complete. Considerations for direct and indirect harm to these plants and populations need to be considered for the anticipated 6-year construction process. These harms include: direct inundation of land and populations, direct effect to soil moisture content and subsequent plants with an "impact-zone" of the expanded waterline, direct effect of soil compact and change in soil physical properties in areas with increased traffic and movement, indirect effect of increased particulate matter and air pollutants, indirect effect of increased noise on pollinators and seed dispersers for the plant species.

- At least two species need to be considered with great prudence. At least one population of *Calochortus pulchellus* will be inundated that, as far as we know, is the eastern-most population of this species. Another plant in the proposed inundation area is *Thysanocarpos radians*, one of our locally rare, or "unusual" plants that may be more common in other parts of the state, but that is limited in our area. These and any additional CEQA-protected species within the area of construction and inundation need to be mapped. Additionally, mitigation plans need to specifically spell out measures taken to ensure that mitigation is done correctly and effectively, and monitored for a minimum of five years after project completion.

- While the attached list contains the special status plant species known to exist in the Los Vaqueros area, there is potential for additional special status species to be found on the project site. For this reason, CNPS requests that the DEIR allow for complete surveys for federally and state listed species as well as special-status plants, bryophytes and wildlife that are protected under CEQA. We request that a thorough biological site assessment be conducted at the project site by qualified botanists and wildlife biologists to determine if suitable habitat exists for special-status plant, bryophyte, and wildlife species. If suitable habitat exists, in order for a project to comply with CEQA, focused protocol-level special-status species surveys should be conducted at the site prior to issuing a permit. CNPS requests that protocol-level plant surveys be conducted during the appropriate active growing stage of the life cycle of the target species. The surveys require adequate advance planning. Furthermore, we recommend that in addition to addressing federal and state listed species and CNPS List 1A, 1B and 2 species, the following species should also be addressed prior to issuing permits: plants and bryophytes that are CNPS List 1A, 1B, 2, 3 or 4 species, lichens on CDFG's Special Vascular Plants, Bryophytes, and Lichens List[1], plants listed in the *Rare, Unusual and*

[1] CDFG. California Department of Fish and Game Natural Diversity Database; Special Vascular Plants, Bryophytes, and Lichens List. July 2004 (periodically updated).

Significant Plants of Alameda and Contra Costa Counties, and plants that are federal species of concern or federally-listed as species of local concern. This request is in accordance with CDFG Habitat Conservation Planning Branch recommendations for "...protection of plants which are regionally significant, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 and 4."[2]

- Plants make up an integral element of an ecosystem. In the case of the REP, many plant communities that provide habitat to special status animals will be affected by the proposed plan. In order to fairly assess the damage to the ecosystem, and cumulative damages incurred, it serves the committee well to consider the landscape metrics of this site, in order to understand how this landscape supports the wonderful environment within it. We would like to see an analysis utilizing landscape metrics that may better predict the how the populations and metapopulations of red-legged frogs, tiger salamanders, and fairy shrimp (to name a few) will function in a new landscape.

- Given that the expansion can be argued soundly, mitigations also need to be carefully considered at this stage in the process. The expansion is scheduled to inundate mitigations from the initial dam construction. These mitigations include, but are not limited to; one to two acres of mitigation wetlands and up to 176 acres of recently planted oak seedlings. The loss of these mitigations needs to be deemed necessary for this report, in addition to mitigation efforts that will anticipate additional harm or take to special status plant species.

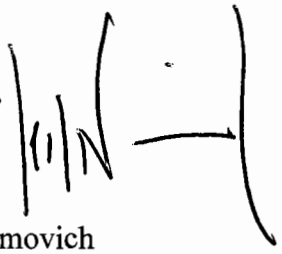
- CNPS requests on-site mitigation for the plant species on the attached list as well as any other federal or state listed species and special status species found during surveys. Harmful impacts on these species should be avoided.

- Restoration work and mitigation work will utilize only certified native plants grown from locally collected seed in order to maintain the genetic integrity of the existing populations. Best management practices will be utilized in order to restrict any introduction of weeds and invasive species. If such new species are found post-construction, the abatement and removal of this damage needs to be addressed in mitigation practices.

CNPS looks forward to submitting further comments through the scoping and EIS/R process. Questions and concerns can be addressed to the Conservation Analyst. We look forward to working with you on this process.

[2] Department of Fish and Game Habitat Conservation Branch.
http://www.dfg.ca.gov.hcpb/species/t_e_spp/nat_plnt_consv.shtml. Accessed on December 9, 2004

Sincerely,



Lech Naumovich
East Bay Conservation Analyst
California Native Plant Society
(510) 734 - 0335

APPENDIX 1: CEQA-Protected Rare and Unusual Plants of Los Vaqueros 2005

(Statewide Rare Plants in Upper Case)

Rank in East Bay	Species	Common Name	Habitat
	Allenrolfea occidentalis	iodine bush	Alkali areas
A2	Allium amplectens	narrow-leaved onion	Dry Open Slopes; Serpentine; Woodland; Misc. habitats
A1	Allium crispum	crinkled onion	Dry Open Slopes; Serpentine; Misc. habitats
A2	Amsinckia eastwoodiae	Eastwood's fiddleneck	Grassland; Misc. habitats
*A1	AMSINCKIA GRANDIFLORA	large-flowered fiddleneck	Grassland; Sand or Sandstone; Misc. habitats
*A2	ARCTOSTAPHYLOS AURICULATA	Mt. Diablo manzanita	Chaparral; Sand or Sandstone
A1?	Aristida oligantha(?)	oldfield three-awn	Dry Open Slopes; Grassland; Scrub; Woodland
A1?	Astragalus oxyphysus(?) (A. asymmetricus is more common)	Diablo locoweed	Grassland; Scrub
*A1	ASTRAGALUS TENER VAR. TENER	alkali milk-vetch	Alkali areas; Grassland; Vernal Pools; Misc. Wetlands
*A2	ATRIPLEX CORONATA VAR. CORONATA	crownscale	Alkali areas; Grassland; Vernal Pools
*A2	ATRIPLEX DEPRESSA	brittlescale	Alkali areas; Grassland; Misc. Wetlands
*A2	ATRIPLEX JOAQUINIANA	San Joaquin saltbush	Alkali areas; Grassland; Misc. Wetlands
A2	Berberis aquifolium var. dictyota	Jepson's mahonia	Chaparral; Forest; Rock, Tallus or Scree; Scrub; Woodland
A1	Calochortus invenustus	plain Mariposa-lily	Dry Open Slopes; Misc. habitats
*A2	CALOCHORTUS PULCHELLUS	Mt. Diablo fairy-lantern	Chaparral; Serpentine; Woodland
A2	Carex senta	rough sedge	Riparian areas; Misc. Wetlands
A2	Castilleja applegatei ssp. martinii	wavy-leaved Indian paintbrush	Chaparral; Scrub
A1	Claytonia rubra ssp. depressa	miner's lettuce	Scrub
A2	Collinsia parviflora	blue-eyed Mary	Misc. habitats
*A1	CONVOLVULUS SIMULANS	small-flowered morning-glory	Grassland; Serpentine; Misc. habitats
A2	Cyperus niger	black sedge	Misc. Wetlands; Misc. habitats
A1	Delphinium gracilentum	meadow larkspur	Forest
A1	Dodecatheon clevelandii ssp. sanctarum (ssp. patulum is more common)	Padre's shooting star	Woodlands
A1	Downingia bella	Hoover's downingia	Vernal Pools
A2	Downingia insignis	cupped downingia	Vernal Pools
A2	Ericameria arborescens	golden-fleece	Chaparral; Forest; Woodland
*A2	ERIOPHYLLUM JEPSONII	Jepson's woolly sunflower	Chaparral; Serpentine; Woodland
A2	Eryngium vaseyi	Vasey's coyote-thistle	Alkali areas; Vernal Pools
A2	Eschscholzia caespitosa	tufted poppy	Chaparral
A2	Festuca elmeri	Elmer's fescue	Riparian

A2	Parvisedum pentandrum	Mount Hamilton sedella	Rock, Tallus or Scree; Sand or Sandstone areas; Serpentine
A2	Pilularia americana	pillwort	Vernal Pools; Misc. Wetlands
A2	Plagiobothrys leptocladus	alkali plagiobothrys	Alkali areas
A2	Plagiobothrys tenellus	slender popcornflower	Misc. habitats
A2	Plectritis ciliosa ssp. unknown	long-spurred plectritis	Grassland; Woodland
A2	Plectritis congesta	sea blush	Coastal Bluff; Woodland
A2	Pleuropogon californicus	semaphore grass	Riparian areas; Misc. Wetlands
A2	Puccinellia simplex	little alkali grass	Alkali areas
A1	Quercus X joloensis	blue oak X valley oak	Forest; Woodland
A2	Ranunculus occidentalis	western buttercup	Grassland; Woodland
A2	Ribes quercetorum	oak gooseberry	Chaparral; Woodland
A2	Rorippa curvisiliqua	yellow cress	Freshwater Marsh
A2	Salix scouleriana	Scouler's willow	Misc. Wetlands
A2	Sesuvium verrucosum	sea-purslane	Alkali areas
A1?	Solanum xantii(?) (S. umbelliferum is more common)	purple nightshade	Forest; Scrub; Woodland
A2	Spergularia macrotheca var. leucantha	large-flowered sand spurry	Alkali areas; Vernal Pools
A2	Sporobolus airoides	alkali sacaton	Alkali areas
A2	Thysanocarpus radians	ribbed fringe pod	Misc. habitats
A2	Tropidocarpum gracile	slender tropidocarpum	Alkali areas; Grassland
A2	Viola purpurea ssp. quercetorum	mountain violet	Grassland; Scrub
A2	Vulpia microstachys var. microstachys (var. pauciflora is more common)	Nuttall's fescue	Dry Open Slopes; Rock, Tallus or Scree; Sand or Sandstone; Serpentine; Woodland
A1?	Zigadenus paniculatus(?) (Z. fremontii is more common)	panicled zygadene	Dry Open Slopes; Forest; Misc. habitats

Explanation of Ranks

***A1 or *A2**: Species in Alameda and Contra Costa counties listed as rare, threatened or endangered statewide by federal or state agencies or by the state level of CNPS.

A1x: Species previously known from Alameda or Contra Costa Counties, but now presumed extirpated here.

A1: Species currently known from 2 or less regions in Alameda and Contra Costa Counties.

A2: Species currently known from 3 to 5 regions in the two counties, or, if more, meeting other important criteria such as small populations, stressed or declining populations, small geographical range, limited or threatened habitat, etc.

A1?: Species with taxonomic or distribution problems that make it unclear if they actually occur here.

Appendix H

CCWD Board of Directors Resolution No. 03-24, June 25, 2003

ESA

RESOLUTION NO. 03-24

A RESOLUTION OF THE BOARD OF DIRECTORS OF CONTRA COSTA WATER DISTRICT MAKING DETERMINATIONS AND ADOPTING CONDITIONS FOR DISTRICT PARTICIPATION IN AND SUPPORT FOR IMPLEMENTATION OF THE CALFED BAY-DELTA PROGRAM PROPOSAL FOR EXPANSION OF LOS VAQUEROS RESERVOIR

RECITALS

1. DISTRICT MISSION: The mission of the Contra Costa Water District ("District") is to strategically provide a reliable supply of high quality water at the lowest cost possible, in an environmentally responsible manner.

2. 1998 LOS VAQUEROS PROJECT PURPOSES: On May 2, 1998 the District dedicated and put into service the Los Vaqueros Project, a 100,000 acre-foot drinking water reservoir in eastern Contra Costa County. The Los Vaqueros Project's primary purposes, as set forth in District Resolution 88-45 (July 27, 1988), are "to improve water quality and provide emergency storage for the District's ratepayers". The additional purposes of the Los Vaqueros Project, as also set forth in Resolution 88-45 (July 27, 1988), are "to provide flood control benefits, maintain and enhance fish and wildlife resources, and provide recreational opportunities consistent with the primary water quality purpose and the preservation of the watershed and the watershed's unique features".

3. ADDITIONAL CONDITIONS SPECIFIED IN 1988 LOS VAQUEROS BALLOT MEASURE: On November 8, 1988, the District's voters overwhelmingly approved the sale of revenue bonds to finance the Los Vaqueros Project, and the election results were declared by the District's Board in its Resolution 88-58

(November 30, 1988). The ballot measure placed before the District's voters by the District's Board of Directors in 1988 said, as required by District Resolution 88-46:

"Shall the Contra Costa Water District be authorized to issue and sell revenue bonds to finance the construction and acquisition of a District-controlled water storage and supply system, generally known as the Los Vaqueros Project, for the primary purposes of enhancing water quality and providing a source of emergency water supply, which shall not be operated in conjunction with a peripheral canal or to increase the export of water from Northern California without subsequent voter approval, with an estimated cost to the District in 1988 dollars of $350,000,000, including reservoirs, recreational facilities, pipelines, pumping plants, fish screens, watershed lands, and other facilities convenient or necessary in obtaining and delivering water and mitigating the environmental impacts thereof?"

4. COMPLIANCE WITH PROJECT PURPOSES AND CONDITIONS: The Los Vaqueros Project has been meeting and will continue to meet the District's commitment, as specified by Resolution 88-45 to:

- provide its customers with high quality water;
- provide its customers with an emergency supply of water;
- provide flood control benefits;
- maintain and enhance the fishery and terrestrial resources of the Delta and the watershed; and
- provide recreational opportunities consistent with the protection of water quality and emergency storage objectives and preservation of the watershed and the watershed's unique features.

Further, the Los Vaqueros Project has also achieved the following results:

- The District built the Los Vaqueros Project at a total cost *less* than the budget of $450,000,000 in actual expenditures ($350,000,000 in 1988 dollars) as committed to and specified by Resolution 88-45;

- The environmental mitigation and protection measures for the Delta and the Los Vaqueros Watershed have exceeded the expectations described in the Final Stage 2 Environmental Impact Report/Environmental Impact Statement for the Los Vaqueros Project (Stage 2 EIR/EIS), provide a net benefit to the Delta and the watershed, and exceed the District's commitment to mitigate environmental impacts to a level of less than significant, as specified by Resolution 88-45;

- The District's Board of Directors committed to developing a recreation plan for the Los Vaqueros Project as part of the Stage 2 EIR/EIS, as specified by Resolution 88-45, and said plan was developed in 1990, adopted by the Board February 15, 1991, and included in the Stage 2 Final EIR/EIS certified by the Board on October 27, 1993;

- The District has implemented a recreation program that significantly exceeds the plan described in the Stage 2 Final EIR/EIS;

- The recreation program at the Los Vaqueros Watershed has been a success, providing a well-attended interpretive center, docent tours of watershed features, more than fifty-five miles of trails, including sixteen miles of multi-use trails with linkages to adjacent lands that are open to the public, and a public fishing resource that has become widely recognized as one of the best of the Bay Area;

- The Los Vaqueros Project is entirely owned and operated by the District; and the entire cost of the Los Vaqueros Project was paid for by the ratepayers of the District; and

- It is the policy of the District to maintain rate increases below the level of inflation; and the District has complied with its policy by maintaining rate increases at less than the rate of inflation for over 10 years, with the

average rate increase during the last 10 years equating to one half of the rate of inflation during that period.

5. CALFED BAY-DELTA PROGRAM PROPOSAL FOR EXPANSION OF LOS VAQUEROS RESERVOIR: CALFED is a consortium of state and federal agencies which are working together to solve the problems of the Sacramento-San Joaquin Delta. The mission of the CALFED Bay-Delta Program is to develop and implement a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta System.

The CALFED Agencies issued the CALFED Bay-Delta Program Final Programmatic Environmental Impact Statement/Environmental Impact Report (CALFED Final PEIS/R) in July 2000, which described the long-term program to restore ecological health and improve water management in the Delta, and disclosed the impacts, cumulative impacts and mitigation measures and strategies for the entire CALFED Bay-Delta Program. The CALFED Agencies on August 28, 2000 adopted Findings and a Programmatic Record of Decision (CALFED ROD) that sets forth the CALFED Bay-Delta Program that is now being implemented. The CALFED ROD requires that project specific environmental documents tier off of the CALFED Final PEIS/R and include specific mitigation measures consistent with the programmatic measures of the CALFED ROD.

The CALFED ROD included expansion of Los Vaqueros Reservoir by up to 400,000 acre-feet (for a total water storage capacity of up to 500,000 acre-feet) as a surface storage project with participation by CCWD and local partners as part of a Bay Area water quality and water supply reliability initiative. The CALFED ROD states: "As part of a Bay Area initiative, an expanded Los Vaqueros Reservoir would provide water quality and water supply reliability benefits to Bay Area water users."

6. CONTRA COSTA WATER DISTRICT PRINCIPLES FOR AN EXPANSION: The District has an interest in the CALFED Bay-Delta Program objectives to provide water quality and supply reliability benefits to Bay Area water users, and to enhance and restore the aquatic and terrestrial habitats and ecological functions of the Bay-Delta. The District must also ensure that the interests of the District and its ratepayers are protected. On April 19, 2000 the District's Board of Directors adopted seven principles (CCWD Principles) with regard to the CALFED ROD that state: "Contra Costa Water District will not support a proposal involving the existing Los Vaqueros Project or use of the Los Vaqueros or Kellogg reservoir sites without the following assurances:

1. The project improves water quality and reliability for CCWD;
2. The project enhances the Delta environment;
3. The project protects and enhances the fisheries and terrestrial species benefits provided by the existing Los Vaqueros Project;
4. The project preserves and increases the recreational opportunities of the Los Vaqueros Project;
5. CCWD must retain control of the watershed and operation of the reservoir;
6. The project protects and reimburses the financial investment made by the CCWD customers who financed the existing $450 million Los Vaqueros Project; and
7. The proposal would be placed before the voters of the Contra Costa Water District

In express recognition of these principles, the CALFED ROD states: "As an existing reservoir operated by the Contra Costa Water District (CCWD), the Los Vaqueros Reservoir is subject to a number of mandates and agreements. DWR and Reclamation will work with CCWD and interested stakeholders to assure that previous commitments, including local voter approval required for expansion, are respected."

7. OVER $50 MILLION OF CALFED STUDIES INCLUDING EXPANSION OF LOS VAQUEROS RESERVOIR AND $7 MILLION OF LOS VAQUEROS EXPANSION STUDIES COMPLETED, AND OVER THIRTY PUBLIC MEETINGS TO DATE: CALFED Agencies have, through a seven-year effort costing over $57 million, studied the environmental impacts of the CALFED Program, including the details of the Los Vaqueros Reservoir expansion, and have studied key planning concerns associated with the Los Vaqueros Reservoir. The CALFED Final PEIS/R constitutes the first tier of environmental analysis, addressing the effects of the CALFED Bay-Delta Program as a whole. Since CALFED Agencies adopted the Record of Decision, CALFED Agencies and the District have formed a Study Team for the purpose of carrying out the CALFED Los Vaqueros Reservoir Expansion Studies (Studies), which started in January 2001. The California Department of Water Resources, California Department of Fish and Game, U.S. Fish and Wildlife Service, Alameda County Water District, Zone 7 of Alameda County Flood Control and Water Conservation District, Santa Clara Valley Water District, City and County of San Francisco Public Utilities Commission, San Francisco Bay Area Water Users Association, and the District executed a Memorandum of Understanding in 2001 that describes how the Studies would be carried out. The District has implemented a public process designed to provide in-depth public information, feedback and consultation:

- A Draft Project Concept Report was produced in August 2002 that conceptually described how a Los Vaqueros Reservoir expansion could be carried out in a way that would meet the CALFED ROD objectives for an expansion project and the District's Principles;
- The Draft Project Concept Report was published and made available at public libraries and other facilities convenient to the general public, and was made

available on the Studies' website, and three public workshops were held on the Draft Project Concept Report on September 10 and September 16, 2002;

- Comments were received from the public on the Draft Project Concept Report through written correspondence and at the public workshops, and all comments on the Draft Project Concept Report were kept as part of the public record;
- Based upon this public participation and further detailed study, a Draft Planning Report was produced in May 2003 that included the detailed information required to determine whether the CALFED Bay-Delta Program proposal could meet the CALFED ROD objectives for an expansion project and the District's Principles,
- The Draft Planning Report described in detail the facilities required for the full range of scenarios of a reservoir expansion under the CALFED Bay-Delta Program proposal, the costs of the facilities, potential project partners, and the operations of the facilities that would be required to meet the CALFED ROD objectives for an expansion project and the District's Principles,
- The Draft Planning Report included an environmental impact analysis that described in detail the full range of environmental impacts of a Los Vaqueros Reservoir expansion, including the details of impacts on: Delta water quality; water levels; water velocities; channel flows; salinity in the western Delta and Bay; fishery and aquatic resources in the Delta and Bay; terrestrial habitat and species as a result of inundating lands within the watershed; terrestrial habitat and species as a result of constructing the project facilities; socioeconomics of the area; environmental justice; and growth;
- The Draft Planning Report also described in detail the benefits of the project for water supply during droughts and water quality for the District and the Bay Area; the net benefits that a Los Vaqueros Reservoir expansion project would

have for Delta fisheries and aquatic resources; the mitigation strategies that would be required to reduce terrestrial impacts in order to meet the CALFED Bay-Delta Program objectives described in the CALFED ROD and the District's Principles; and the institutional arrangements that are required to meet the District's Principles for a CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir;

- The Draft Planning Report also described in detail how the District's investment in the Los Vaqueros Project would be protected and estimated that the District would be reimbursed an amount of up to $200,000,000 in 2008 dollars;
- Copies of draft sections of the Draft Planning Report, known as Draft Briefing Papers, were published and made available at public libraries and other facilities convenient to the general public, and were made available on the Studies website;
- More than thirty public meetings and public workshops within the District and the Bay Area were held on the Draft Project Concept Report, Draft Briefing Papers and Draft Planning Report. Twenty Public Workshops on the Draft Briefing Papers and Draft Planning Report were held on January 30, February 4, February 19, March 4, March 6, March 19, April 17, April 22, May 21, May 29, June 3, June 4 and June 18, 2003, and comments were received from the public through written correspondence and at the public workshops on the Draft Briefing Papers; and
- All comments on the Draft Briefing Papers were kept as part of the public record and together with the comments on the Draft Project Concept Report were responded to and incorporated into and made part of the Draft Planning Report.

The information contained in the Draft Planning Report shows that the CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir that meets the

CALFED ROD objectives for said expansion can and will meet the Principles 1 through 6 inclusive, as adopted by the District's Board of Directors on April 19, 2000. Specifically, the Draft Planning Report shows that water supply reliability during droughts and water quality will be improved by storing high-quality water in the expanded reservoir during wet periods for use in periods of drought; the Draft Planning Report further shows that enhancements to the Delta aquatic environment will be made through the use of state-of-the-art fish screens and through improving the timing and location of diversions and the management of water for environmental purposes, made possible by the expanded reservoir.

RESOLUTION

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Contra Costa Water District that the foregoing Recitals are hereby incorporated into and made a part of these determinations by the Board.

BE IT FURTHER RESOLVED that the Board hereby finds and determines that the purposes of the CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir for a total water storage capacity up to 500,000 acre-feet, as described in the CALFED ROD, are to improve water supply during droughts and water quality for Bay Area water agencies, including the Contra Costa Water District.

BE IT FURTHER RESOLVED that the Board hereby finds and determines that the purposes of the CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir, as described in the CALFED ROD, also are to provide fisheries benefits, to provide environmental benefits, to enhance the Delta environment and to protect Delta endangered species and aquatic resources;

BE IT FURTHER RESOLVED that the Board hereby reaffirms its commitments made to the District's voters in the 1988 Los Vaqueros Project ballot measure that the existing and an expanded Los Vaqueros Reservoir "shall not be operated in conjunction with a peripheral canal or to increase the export of Delta water from Northern California without subsequent [CCWD] voter approval";

BE IT FURTHER RESOLVED that the Board hereby finds and determines that the purposes of the CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir do not include operation of the Los Vaqueros Reservoir in conjunction with a peripheral canal or to increase the export of Delta water from Northern California;

BE IT FURTHER RESOLVED that the Board finds and determines that the support of the District for a CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir is dependent upon the CALFED ROD implementation commitment of "beneficiaries pay" and that the costs of any CALFED project for an expanded Los Vaqueros Reservoir will be borne equitably by the beneficiaries of said project.

BE IT FURTHER RESOLVED that the Board finds and determines that the support of the District for a CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir is dependent upon authorizing federal and/or state legislation that specifically provides for long-term environmental benefits in the Delta as a project purpose.

BE IT FURTHER RESOLVED that consistent with the District's Principles for participation adopted by the Board of Directors on April 19, 2000 and recognized in the CALFED Bay-Delta Program Programmatic Record of Decision on August 28, 2000, the Board finds and determines that the District will not participate in or support the CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir unless the Board determines that the CALFED Bay-Delta Program proposal meets the following conditions:

1. Improves drinking water quality for CCWD customers beyond that available from the existing Los Vaqueros Project;
2. Improves the reliability of water supplies for CCWD customers during droughts;
3. Enhances Delta habitat and protects endangered Delta fisheries and aquatic resources by installing state-of-the-art fish screens on all new intakes and creating an environmental asset through improved location and timing of Delta diversions and storage of water for environmental purposes;
4. Increases the protected land and managed habitat for terrestrial species in the Los Vaqueros Watershed and the surrounding region;
5. Improves and increases fishing, boating, hiking, and educational opportunities in the Los Vaqueros Watershed, consistent with the protection of water quality and the preservation of the watershed and the watershed's unique features;
6. CCWD continues as owner and manager of the Los Vaqueros Watershed;
7. CCWD maintains control over recreation in the Los Vaqueros Watershed;
8. CCWD continues as operator of the Los Vaqueros Reservoir system;
9. CCWD will be reimbursed for the value of the existing Los Vaqueros Project assets shared, replaced, rendered unusable or lost with the expansion project and said reimbursement will be used to purchase additional drought supply and water quality benefits or reduce debt on the existing Los Vaqueros Project;
10. Water rates for CCWD customers will not increase as a result of the expansion project.

BE IT FURTHER RESOLVED that the conditions expressed above regarding implementation of the CALFED Bay-Delta Program proposal for expansion of Los

Vaqueros Reservoir are hereby adopted by the Board of Directors as specific policies of the Contra Costa Water District, and the Board of Directors hereby commits to be bound by said policies in regard to the CALFED Bay-Delta Program proposal.

BE IT FURTHER RESOLVED, that the Board hereby finds and declares that the information contained in the CALFED Final PEIS/R, the Draft Project Concept Report and the Draft Planning Report, together with the information contained in the technical memoranda, all of the comments from the public, and all of the responses to the public comments are hereby made a part of the District's public records concerning consideration of the CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir for a total water storage capacity up to 500,000 acre-feet.

BE IT FURTHER RESOLVED that, under the CALFED ROD, and under the principles adopted by the Board of Directors on April 19, 2000, all subsequent environmental documents required for approvals and permitting will tier off the CALFED Final PEIS/R and will incorporate the full range of environmental impacts described in the Draft Planning Report, and that the full range of environmental impacts, and the specific mitigation measures for these impacts consistent with the programmatic measures of the CALFED ROD, will be disclosed in the environmental documents, and that sound science will be used as part of that process.

BE IT FURTHER RESOLVED that the Board hereby finds and determines that, due to the importance of Los Vaqueros Reservoir, water supply during droughts, water quality, Delta water issues, and environmental issues to the Contra Costa Water District, the District should allow its voters to have an opportunity at an election, to be held throughout the District, to advise the Board on whether they concur with the CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir,

subject to the conditions and assurances specified as District policies by this Resolution.

BE IT FURTHER RESOLVED that the District shall retain the opportunity, which shall be solely within the discretion of the District's Board of Directors, to withdraw District participation in and support for the CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir in the event that the conditions established by said District policies are not met.

BE IT FURTHER RESOLVED that the District's General Manager is hereby authorized and directed to take such steps as he shall determine to be necessary and appropriate to inform the CALFED Bay-Delta Program, and all persons and entities that have expressed an interest in the CALFED Bay-Delta Program proposal for expansion of Los Vaqueros Reservoir, of these determinations and conditions.

* * * * * * * * *

The foregoing resolution was duly and regularly adopted at a meeting held on the 25th day of June 2003, by the Board of Directors of Contra Costa Water District by the following vote:

AYES: Pretti, Boatmun, Anello, Campbell, and Wandry

NOES: None

ABSENT: None

Joseph L. Campbell, President

ATTEST:

Lynne C. Holland, Acting District Secretary

A-2 CCWD CEQA NOTICE OF COMPLETION

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2006012037

Project Title: Los Vaqueros Reservoir Expansion Project

Lead Agency: Contra Costa Water District | Contact Person: Marguerite Naillon

Mailing Address: PO Box H2O | Phone: (925) 688-8018

City: Concord | Zip: 94524-2099 | County: Contra Costa

Project Location: County: Contra Costa and Alameda Counties | City/Nearest Community: Brentwood, Byron

Cross Streets: | Zip Code: 94513, 94514

Longitude/Latitude (degrees, minutes and seconds): 121 ° 43 ′ 40.41″ N / 37 ° 50 ′ 53 ″ W | Total Acres: 20,800

Assessor's Parcel No.: Multiple Parcels | Section: | Twp.: 02S, 03S | Range: 02E, 03E | Base: M.D.B. &M.

Within 2 Miles: State Hwy #: 4 | Waterways: Sacramento-San Joaquin Delta, Kellogg Creek

Airports: Bryon Airport | Railways: | Schools:

Document Type:

CEQA: ☐ NOP ☑ Draft EIR ☐ Early Cons ☐ Supplement/Subsequent EIR ☐ Neg Dec (Prior SCH No.) ☐ Mit Neg Dec Other:

NEPA: ☐ NOI ☐ EA ☑ Draft EIS ☐ FONSI

Other: ☑ Joint Document ☑ Final Document ☐ Other:

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☑ Other: Water & Power

Development Type:

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees
☐ Commercial: Sq.ft. Acres Employees
☐ Industrial: Sq.ft. Acres Employees
☐ Educational:
☐ Recreational:
☑ Water Facilities: Type Storage Reservoir/ Pipelines/Pumps MGD Up to 275 TAF
☐ Transportation: Type
☐ Mining: Mineral
☑ Power: Type Transmission Lines/ Substation MW
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:

☑ Aesthetic/Visual ☑ Agricultural Land ☑ Air Quality ☑ Archeological/Historical ☑ Biological Resources ☐ Coastal Zone ☑ Drainage/Absorption ☑ Economic/Jobs
☐ Fiscal ☑ Flood Plain/Flooding ☑ Forest Land/Fire Hazard ☑ Geologic/Seismic ☑ Minerals ☑ Noise ☐ Population/Housing Balance ☑ Public Services/Facilities
☑ Recreation/Parks ☐ Schools/Universities ☐ Septic Systems ☐ Sewer Capacity ☑ Soil Erosion/Compaction/Grading ☑ Solid Waste ☑ Toxic/Hazardous ☑ Traffic/Circulation
☑ Vegetation ☑ Water Quality ☑ Water Supply/Groundwater ☑ Wetland/Riparian ☑ Growth Inducement ☑ Land Use ☑ Cumulative Effects ☑ Other: Palentological Resources, Climate Change

Present Land Use/Zoning/General Plan Designation:

Multiple land use designations including agricultural and open space

Project Description: *(please use a separate page if necessary)*

Construct and operate an expanded Los Vaqueros Reservoir with a storage capacity of up to 275 thousand acre-feet, associated new Delta Intake and Pump Station; up to 19 miles of conveyance pipelines; an enlarged Transfer Facility; additional power supply facilities including a new substation; and recreation facilities. The project purpose is to develop water supplies for environmental water management that supports fish protection, habitat management, and other environmental water needs in the Delta and tributary river systems, and to improve water supply reliability and water quality for urban users in the San Francisco Bay Area.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

X	Air Resources Board		Office of Emergency Services
S	Boating & Waterways, Department of	S	Office of Historic Preservation
	California Highway Patrol		Office of Public School Construction
S	Caltrans District # 4, 10	S	Parks & Recreation, Department of
S	Caltrans Division of Aeronautics		Pesticide Regulation, Department of
	Caltrans Planning		Public Utilities Commission
S	Central Valley Flood Protection Board	S	Regional WQCB # 2, 5
	Coachella Valley Mtns. Conservancy	S	Resources Agency
	Coastal Commission		S.F. Bay Conservation & Development Comm.
	Colorado River Board		San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
S	Conservation, Department of		San Joaquin River Conservancy
	Corrections, Department of		Santa Monica Mtns. Conservancy
S	Delta Protection Commission	S	State Lands Commission
	Education, Department of		SWRCB: Clean Water Grants
	Energy Commission	S	SWRCB: Water Quality
S	Fish & Game Region # 2, 3	S	SWRCB: Water Rights
	Food & Agriculture, Department of		Tahoe Regional Planning Agency
	Forestry and Fire Protection, Department of		Toxic Substances Control, Department of
	General Services, Department of	S	Water Resources, Department of
S	Health Services, Department of		
	Housing & Community Development	S	Other: CalEPA
	Integrated Waste Management Board	S	Other: California Bay Delta Authority
S	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date _____ Ending Date _____

Lead Agency (Complete if applicable):

Consulting Firm: Environmental Science Associates
Address: 2600 Capitol Avenue, Suite 200
City/State/Zip: Sacramento, CA 95816
Contact: Leslie Mouton
Phone: (916) 564-4500

Applicant: Contra Costa Water District
Address: PO Box H2O
City/State/Zip: Concord, CA 94524-2099
Phone: (925) 688-8018

Signature of Lead Agency Representative: _____ **Date:** _____

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

A-3 RECLAMATION NOTICE OF AVAILABILITY

4310-MN-P

DEPARTMENT OF THE INTERIOR

Bureau of Reclamation

Los Vaqueros Reservoir Expansion, Contra Costa County, California

AGENCY: Bureau of Reclamation, Interior.

ACTION: Notice of availability of the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) and notice of public hearings.

SUMMARY: The Bureau of Reclamation (Reclamation), as the National Environmental Policy Act Federal lead agency, and the Contra Costa Water District (CCWD), as the California Environmental Quality Act State lead agency, have made available for public review and comment the Los Vaqueros Reservoir Expansion Project Draft EIS/EIR. The Draft EIS/EIR describes and presents the environmental effects of the No Action Alternative and four action alternatives. Five public hearings will be held to receive comments from individuals and organizations on the Draft EIS/EIR.

DATES: Five public hearings have been scheduled to receive oral or written comments regarding environmental effects:

- Monday, March 23, 2009, 1:30 p.m. – 3:30 p.m., Sacramento, CA
- Tuesday, March 24, 2009, 6:30 p.m. – 8:30 p.m., Livermore, CA
- Thursday, March 26, 2009, 6:30 p.m. – 8:30 p.m., Dublin, CA
- Tuesday, March 31, 2009, 6:30 p.m. – 8:30 p.m., Concord, CA
- Thursday, April 2, 2009, 6:30 p.m. – 8:30 p.m., Oakley, CA

A 1-hour open house to view project information and interact with the project team will precede the public hearings.

The Draft EIS/EIR will be available for a 60-day public review period. Comments are due by **[Insert Date 60 days after date of publication in the FEDERAL REGISTER].**

ADDRESSES: The public hearings will be held at the following locations:

- Sacramento at the Bonderson Building Hearing Room 102A/B, 901 P St.
- Livermore at Zone 7 Water Agency Board Room, 100 North Canyons Parkway
- Dublin at the San Ramon Services District Board Room, 7051 Dublin Blvd.
- Concord at the Heald College and Conference Center, 5130 Commercial Circle
- Oakley at the Ironhouse Elementary Multi-purpose Room, 4801 Frank Hengel Way

Send written comments on the Draft EIS/EIR to Ms. Sharon McHale, Bureau of Reclamation, 2800 Cottage Way, Sacramento, CA 95825.

Copies of the Draft EIS/EIR may be requested from Ms. Sharon McHale, by writing to Bureau of Reclamation, 2800 Cottage Way, Sacramento CA 95825; by calling 916-978-5086 (TDD 916-978-5608); or by e-mailing *smchale@mp.usbr.gov*. The Draft EIS/EIR is also accessible from the following website: *http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=903.* See Supplementary Information Section for locations where copies of the Draft EIS/EIR are available for public review.

FOR FURTHER INFORMATION CONTACT: Ms. Sharon McHale, Bureau of Reclamation, at 916-978-5086 (TDD 916-978-5608) or *smchale@mp.usbr.gov*.

SUPPLEMENTARY INFORMATION: The Draft EIS/EIR documents the direct, indirect, and cumulative effects to the physical, biological, and socioeconomic environment that may result from the expansion of Los Vaqueros Reservoir.

The Los Vaqueros Reservoir Expansion Project Draft EIS/EIR evaluates expanding

the existing Los Vaqueros Reservoir and conveyance facilities. The project objectives consist of: (1) developing water supplies for environmental water management that supports fish protection, habitat management, and other environmental water needs; (2) increasing water supply reliability for water providers within the San Francisco Bay Area, to help meet municipal and industrial water demands during drought periods and emergencies or to address shortages due to regulatory and environmental restrictions; and (3) improving the quality of water deliveries to municipal and industrial customers in the San Francisco Bay Area, without impairing the project's ability to meet the environmental and water supply reliability objectives stated above.

One of the five potential surface storage projects described in the CALFED Bay-Delta Program's long-term plan is the expansion of the existing Los Vaqueros Reservoir, an existing 100,000 acre-foot off-stream surface storage facility, located in Contra Costa County, California. The existing facility is owned and operated by the CCWD.

The primary study area includes the Los Vaqueros Reservoir watershed and associated dam and reservoir facilities, which are situated in the coastal foothills west of the Delta and east of the Bay Area, the central and south Delta, and service areas of Bay Area water agencies. The Bay Area water agencies affected include CCWD, Alameda County Water District, Santa Clara Valley Water District, and Alameda County Flood Control and Water Conservation District – Zone 7. Due to the project influence on other programs and projects, an extended study area is defined to include the service areas of the San Francisco Public Utility Commission and the Central Valley of California.

Reclamation was authorized in Public Law 108-7 (Omnibus Appropriations Act of 2003) to conduct a feasibility-level investigation of the potential expansion of Los

Vaqueros Reservoir. Planning studies have focused on identifying water resources problems, needs, and opportunities in the primary study area; developing a set of planning objectives; and formulating alternatives.

Copies of the Draft EIS/EIR are available for public review at the following locations:

- Bureau of Reclamation, Mid-Pacific Region, Regional Library, 2800 Cottage Way, Sacramento, CA 95825
- Contra Costa Water District 1331 Concord Avenue, Concord, CA 94520
- California Bay-Delta Authority, 650 Capitol Mall, 5th Floor, Sacramento, CA 95814
- Bureau of Reclamation, Denver Office Library, Building 67, Room 167, Denver Federal Center, 6th and Kipling, Denver, CO 80225
- Natural Resources Library, U.S. Department of the Interior, 1849 C Street NW., Main Interior Building, Washington, DC 20240-0001

If special assistance is required at the public hearings, please contact Ms. Lynnette Wirth at 916-978-5100, TDD 916-978-5608, or via email at *lwirth@mp.usbr.gov*. Please notify Ms. Wirth as far in advance as possible to enable Reclamation to secure the needed services. If a request cannot be honored, the requestor will be notified. A telephone device for the hearing impaired (TDD) is available at 916-978-5608.

Before including your name, address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment - including your personal identifying information - may be made publicly available at any

time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Dated: February 11, 2009

Signed: /s/ Richard M. Johnson
Richard M. Johnson
Acting Regional Director
Mid-Pacific Region

APPENDIX B
Alternatives Development

Introduction

In 2001, the U.S. Department of the Interior, Bureau of Reclamation, Mid-Pacific Region (Reclamation), California Department of Water Resources (DWR), and Contra Costa Water District (CCWD) began appraisal-level studies of the potential to expand Los Vaquero Reservoir to address regional water supply reliability and water quality needs. Expansion of Los Vaqueros was one of five potential surface water storage projects identified by the CALFED Bay-Delta Program (CALFED) as warranting further study. The appraisal-level studies indicated that expanding the reservoir by as much as 400,000 acre-feet was technically feasible and could provide water quality and water supply reliability to Bay Area water agencies in the region and also provide potential benefits to fisheries sensitive to water management operations in the Sacramento-San Joaquin Delta (Delta). Reclamation was directed by the Omnibus Appropriations Act of 2003 to conduct a feasibility-level investigation of the potential expansion of Los Vaqueros Reservoir.

This appendix contains a description of the comprehensive alternatives development process initiated after voters in the CCWD service area approved an advisory measure in 2004 to continue investigating the potential for expansion of Los Vaqueros Reservoir. The alternatives development process was based partly on the *Project Concept Report* (CCWD, 2002) and the *Final Draft Planning Report* (CCWD, 2004). The process resulted in the development of four action alternatives which are evaluated this Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR). The No Project/No Action Alternative is also discussed.

The alternatives development process consisted of the following three steps:

- Initial concepts
- Initial plans
- Alternatives development and refinement

This appendix also includes a summary of the evaluation of alternative sites for project components including intakes, pipelines, and conveyance facilities that are included in the action alternatives.

Guidelines and Requirements

The following guidelines and requirements were used in the identification, development, and refinement of alternatives. Each is described briefly below.

- Project objectives, purpose, and need
- Planning constraints and guidelines
- Potential project participants and their interests
- Operational parameters including water right permit requirements

Project Objectives, Purpose, and Need

The Los Vaqueros Reservoir Expansion Project objectives are to use an expanded Los Vaqueros Reservoir system to:

Primary Objectives:

- Develop water supplies for environmental water management that supports fish protection, habitat management, and other environmental water needs.

- Increase water supply reliability for water providers within the San Francisco Bay Area to help meet municipal and industrial water demands during drought periods and emergencies or to address shortages due to regulatory and environmental restrictions.

Secondary Objective:

- Improve the quality of water deliveries to municipal and industrial customers in the San Francisco Bay Area, without impairing the project's ability to meet the environmental and water supply reliability objectives stated above.

The primary project purpose is to use an expanded Los Vaqueros Reservoir system to develop water supplies for environmental water management that supports fish protection, habitat management, and other environmental water needs in the Delta and tributary river systems, and to improve water supply reliability for urban users in the San Francisco Bay Area (Bay Area).

The need for this project is driven by the following conditions:

- The Delta ecosystem is in a state of serious decline, with primary productivity very low and fish populations decreasing to record low levels, putting at least one species - the delta smelt (*Hypomesus transpacificus*) - on the brink of extinction.

- Insufficient quantities of water and lack of storage and flexibility in managing the timing and location of diversions for environmental and municipal water supplies are contributing to the ecosystem's decline.

- Ecosystem decline has put other beneficial uses of water supplies conveyed through the Delta at risk, leading to court-ordered limits on Delta pumping and greatly reducing water supply reliability for millions of people.

Improved storage and conveyance of environmental water supplies can help improve the Delta ecosystem conditions and reduce conflict among beneficial uses of Delta water supplies.

Planning Constraints and Guidelines

In addition to physical conditions such as topography and hydrology, a number of planning constraints were considered in the identification, development, and refinement of alternatives, including the federal authorization for the reservoir expansion studies, laws, regulations, and policies, and the CCWD Board Principles. These are discussed below.

Federal Authorization

The Omnibus Appropriations Act of 2003 authorized the Secretary of Interior, in carrying out CALFED-related activities, to undertake feasibility studies for enlarging Los Vaqueros Reservoir and prepare a Federal Feasibility Report. Congress again authorized the Secretary to conduct planning and feasibility studies for enlarging Los Vaqueros Reservoir in the Water Supply, Reliability, and Environmental Improvement Act of 2004. The federal feasibility study must be conducted according to federal planning principles and guidelines. Many of the planning principles are based on the *Federal Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (federal P&Gs)* (U.S. Water Resources Council, 1983).

Laws, Regulations, and Policies

Numerous laws, regulations, executive orders, and policies needed to be considered in developing the alternatives, including the National Environmental Policy Act (NEPA), Fish and Wildlife Coordination Act, Clean Air Act, Clean Water Act, federal and California Endangered Species Acts, California Environmental Quality Act (CEQA), Central Valley Project Improvement Act as well as the CALFED Record of Decision (ROD).

NEPA/CEQA Requirements

Together, NEPA and CEQA require consideration of a range of alternatives to a proposed action that potentially could attain most of the basic project objectives and accomplish the project purpose and need while avoiding or minimizing environmental impacts. The purpose of including alternatives in an EIS/EIR is to offer a clear basis for choice by the decision-makers and the public as to whether and how to proceed with the proposed action. An EIS/EIR must also include a consideration of the No Action (NEPA) and No Project (CEQA) alternative.

NEPA Requirements

According to the Council on Environmental Quality NEPA regulations (Title 40 Code of Federal Regulations (CFR) § 1502.14), the alternatives section of an EIS is required to contain a rigorous exploration and objective evaluation of all reasonable alternatives, including the No Action Alternative. The discussion of alternatives must include sufficient information for a reasoned choice of the alternatives in terms of environmental aspects to be made. For

alternatives that are not carried forward for detailed study, the EIS must include a brief discussion of the basis for this decision. NEPA requires substantial analysis of all the alternatives so that their merits can be compared (40 CFR 1502.14[b]).

CEQA Requirements

CEQA requires that an EIR include a discussion of the alternatives to enable an evaluation of whether there are other means of achieving the project's goals and objectives while avoiding or reducing the environmental effects of the project. The following contains excerpts from the CEQA Guidelines that set forth the requirements for describing and evaluating alternatives in an EIR.

Section 15126.6(b) of the CEQA Guidelines states that:

> "*...the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or could be more costly.*"

Pursuant to Section 15126.6(d) of the CEQA Guidelines, an EIR must describe and evaluate a reasonable range of alternatives that could potentially attain most of the basic project objectives and would avoid or substantially lessen any of the significant impacts of the Proposed Project. Section 15126.6(f) of the CEQA Guidelines provides guidance on the extent of the alternatives analysis required:

> *The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making.*

As described under Section 15126.6(d) of the CEQA Guidelines:

> *The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.*

Section 15126.6(e)(1) of the CEQA Guidelines also requires analysis of a "no project" alternative. The purpose of evaluating the No Project Alternative is to allow decision-makers to compare the potential consequences of the project with the consequences that would occur without implementation of the project.

CCWD Board Principles

The CCWD Board of Director's 2003 Resolution No. 03-24 and Measure N, approved by the CCWD voters on March 2, 2004 (CCWD, 2003) were both considered in developing alternatives. The resolution and measure contain a description of the conditions that must be met for the CCWD Board of Directors to consider approval of the reservoir expansion project.

> In Resolution No. 03-24 the CCWD Board determined that the District will not participate in or support the proposal for expansion of Los Vaqueros Reservoir unless the Board determines that the proposal meets the following conditions:
>
> 1. Improves drinking water quality for CCWD customers beyond that available from the existing Los Vaqueros Project;
>
> 2. Improves the reliability of water supplies for CCWD customers during droughts;
>
> 3. Enhances Delta habitat and protects endangered Delta fisheries and aquatic resources by installing state-of-the-art fish screens on all new intakes and creating an environmental asset through improved location and timing of Delta diversions and storage of water for environmental purposes;
>
> 4. Increases the protected land and managed habitat for terrestrial species in the Los Vaqueros Watershed and the surrounding region;
>
> 5. Improves and increases fishing, boating, hiking, and educational opportunities in the Los Vaqueros Watershed, consistent with the protection of water quality and the preservation of the watershed and the watershed's unique features;
>
> 6. CCWD continues as owner and manager of the Los Vaqueros Watershed;
>
> 7. CCWD maintains control over recreation in the Los Vaqueros Watershed;
>
> 8. CCWD continues as operator of the Los Vaqueros Reservoir system;
>
> 9. CCWD will be reimbursed for the value of the existing Los Vaqueros Project assets shared, replaced, rendered unusable or lost with the expansion project and said reimbursement will be used to purchase additional drought supply and water quality benefits or reduce debt on the existing Los Vaqueros Project;
>
> 10. Water rates for CCWD customers will not increase as a result of the expansion project.

Potential Project Participants and Interests

CCWD and Reclamation have worked with DWR and other potential project beneficiaries to develop and refine alternatives that would meet the project objectives in a cost effective way. Alternatives development has been guided by the following interests:

> **Federal** – The potential federal interest in the reservoir expansion project includes the protection and restoration of Delta fisheries, water supplies for environmental purposes, including fisheries and wetland habitat, and the reliability of Bay Area CVP contract supplies. The type and extent of federal interest will be determined by the appropriate decision makers based on the separate Federal Feasibility Report and other pertinent information.

State – The potential state interest in the reservoir expansion project includes the protection and restoration of Delta fisheries, water supplies for environmental purposes, and the reliability and quality of Bay Area SWP contract supplies. The type and extent of state interest will be determined by the appropriate decision makers based on the separate State Feasibility Report and other pertinent information.

Regional and Local – Should they choose to participate, the three South Bay water agencies' (Alameda County Flood Control and Water Conservation District, Zone 7 (Zone 7), Alameda County Water District (ACWD), and Santa Clara Valley Water District (SCVWD)) interest in the reservoir expansion project includes the protection and restoration of Delta fisheries and the reliability and quality of South Bay water supplies. The greater Bay Area interest in the project includes the addition of local emergency storage.

CCWD – CCWD's interest in the reservoir expansion is to maintain and expand the water quality benefits of the reservoir for its customers, gain water supply reliability benefits, and coordinate reservoir operations with federal and/or state water operations to protect and restore Delta fisheries and provide other environmental benefits.

Operational Parameters

Operational parameters drawn from CCWD's existing biological opinions and water rights permit also guided the alternatives development. The operational parameters, which are described below, were identified in order to contribute to the project objectives and meet the CCWD Board Principles for a reservoir expansion project while avoiding or minimizing impacts to other Delta water users including the CVP and SWP.

Operations and Delta Diversion

(1) Filling of the expanded Los Vaqueros Reservoir would occur during periods of low salinity with either surplus flows under existing water rights or with CVP and/or SWP existing supplies. Operations would be coordinated with SWP and CVP operations to minimize adverse impacts and to provide the project benefits.

(2) No water would be diverted through the Los Vaqueros intake system from the Delta during a 30-day no-diversion period in the spring. It is assumed that other Delta operational restrictions would not affect reservoir filling and direct deliveries outside of the no-diversion period.

The analysis presented in Section 4.3 and Appendix C demonstrates that operations under these assumptions, in conjunction with the use of positive-barrier fish screens and water quality limits on reservoir filling, would not cause adverse impacts on sensitive fish species.

Water Rights

None of the alternatives would involve diverting more water from the Delta than allowed under existing water rights or changing the ownership or priority of those water rights. The project would change the timing and location of diversions such that fish protection, environmental water management, and Bay Area water supply reliability would improve. In addition to its long-term contract with Reclamation, CCWD has separate water rights for the Los Vaqueros Reservoir. CCWD's separate Los Vaqueros water rights are subject to permit terms and conditions to ensure

that exercising those water rights does not adversely affect the CVP and SWP operations under the water rights permits held by Reclamation and DWR, respectively. Under all alternatives, the use of the collective water rights of the project participants would be coordinated to operate the existing and new facilities in a manner designed to accomplish the project objectives without adversely affecting CVP and SWP operation. This would be achieved through agreements among the parties and permit changes as necessary.

Step 1: Initial Concepts

Initial concepts for achieving the project objectives were identified, evaluated, and screened during the first step of alternatives development. An initial concept was defined as any structural or non-structural action that would address one or more of the project objectives. The first step included the following:

- Develop a range of initial concepts, or resource management measures, that would potentially contribute to one or more of the project purposes.
- Develop initial screening criteria to identify whether a concept is likely to contribute to a project purpose and could be implemented, taking into consideration technical and legal constraints.
- Evaluate the concepts, using the initial screening criteria, to determine which concepts should be carried forward for further evaluation.

Additional factors in the selection of initial concepts were:

- The potential for a concept to address at least one project objective directly without adversely affecting other project objectives
- The potential for a concept to work in tandem with other concepts to address other project objectives
- Whether a concept had a geographic, operations, or physical relationship to problems and opportunities in the project study area.

The evaluation process of developing initial concepts is discussed in more detail in the *Initial Alternatives Information Report* (Reclamation, 2005), in which the initial concepts are referred to as resource management measures.

More than 30 initial concepts were identified as part of previous studies, programs, and projects, and through agency and consultant team meetings, field inspections, outreach, and environmental scoping activities. Throughout the alternatives development process, Reclamation and CCWD coordinated with local, state, and federal agencies through regular meetings of the Agency Coordination Work Group, which was established in 2002 after the Los Vaqueros Memorandum of Understanding was signed. Because the primary purpose of the reservoir expansion is to address problems and opportunities within the Delta and Bay Area regions, the geographic location of potential concepts was limited. Therefore, all concepts identified herein could be implemented within the project study area.

Initial Concept Screening

Concepts were rated on a scale of high to low based on their relative ability to address the primary and secondary project objectives. Most of the concepts that were rated as moderately, or less than moderately, addressing a project objective were deleted from further consideration, while concepts rated higher were retained. This distinction was imposed primarily because concepts that could only marginally address a project objective were generally found to be inconsistent with the planning constraints or other principles and criteria described above. For example, many of the concepts that could improve water supply reliability for a limited number of Bay Area water agencies would not eliminate the need for expansion of Los Vaqueros Reservoir. These concepts are not *alternatives* to the proposed project. In the long-term, improvements in water supply reliability will need to come from multiple sources in order to fully address the conditions affecting Bay Area agencies. Other major factors and rationale in retaining or deleting a concept are included in the following descriptions of the individual concepts.

Initial Concepts Addressing Water Supply Reliability

Table B-1 lists the initial concepts related primarily to addressing the Bay Area water supply reliability objective (one of the primary objectives) and the results of the evaluation of these concepts. **Figure B-1** shows the location of reservoirs that are referred to in the various concepts listed in Table B-1.

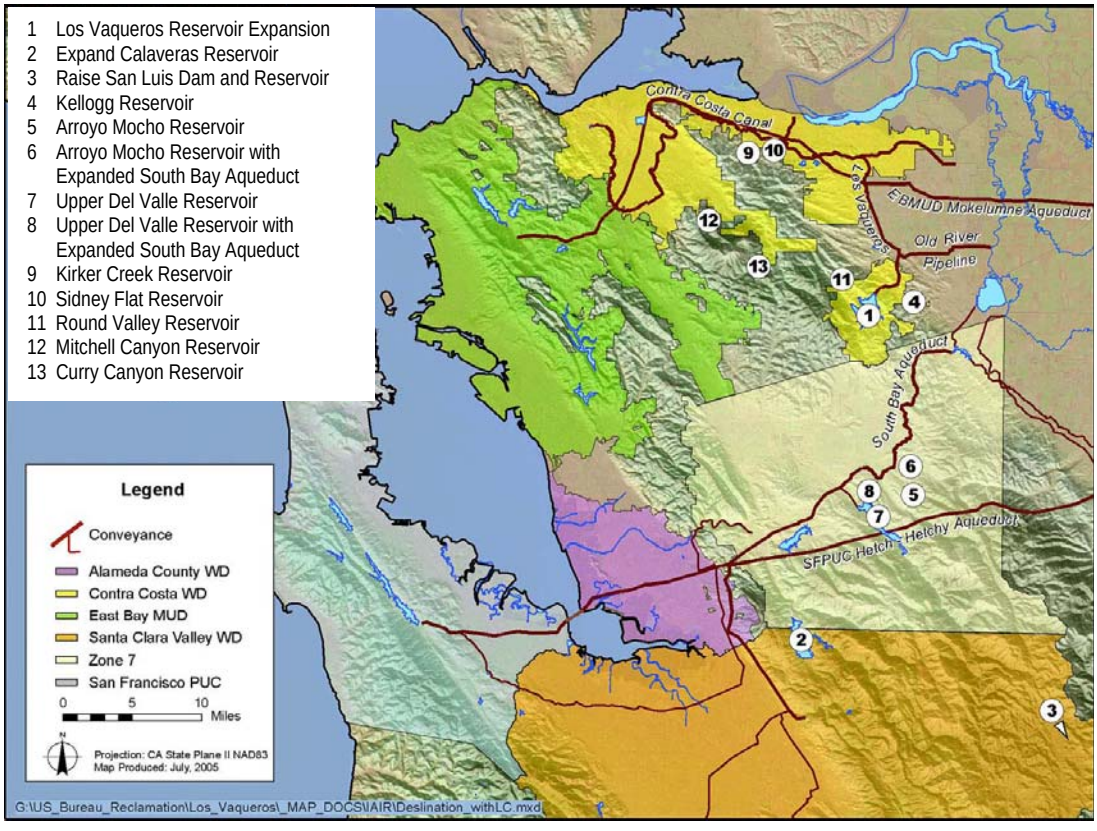


Figure B-1
Reservoir Storage Concepts Considered

TABLE B-1
INITIAL CONCEPTS ADDRESSING BAY AREA WATER SUPPLY RELIABILITY

Initial Concept	Potential to Address Project Objective	Status and Rationale
Surface Water Storage		
Enlarge Los Vaqueros Reservoir to increase conservation storage space (300 to 500 TAF total storage)	**High** – Could provide up to 400 TAF of new local storage for water supply reliability, and has potential to contribute to other project planning objectives	**Retained** – Specifically authorized for study; could contribute to other project planning objectives
Raise Los Vaqueros Dam In-Place to increase conservation storage space (115 to 275 TAF total storage)	**Moderate to High** – Could provide up to 175 TAF of new local storage for water supply reliability; has potential to contribute to other project planning objectives	**Retained** – Raising in-place potentially less costly than new enlarged dam; smaller increment of storage; could contribute to other project planning objectives
Raise Calaveras Dam to increase conservation storage space	**Low** – Could provide up to 320 TAF of local storage but would benefit only agencies with existing SFPUC contracts (ACWD and SCVWD)	**Deleted** – Low potential to provide regional water supply reliability benefits in the Bay Area
Enlarge San Luis Reservoir to increase conservation storage space	**Low** – Could provide up to 200 TAF but would serve only one agency (SCVWD)	**Deleted** – High unit cost; low potential to contribute to increasing regional Bay Area water supply reliability
Raise Pacheco Dam to increase conservation storage space	**Low** – Could provide up to 120 TAF but would serve only one agency (SCVWD)	**Deleted** – High unit cost; low potential to contribute to increasing water supply reliability in the project study area; limited potential to support other objectives
Construct new conservation storage at Upper Lake Del Valle Dam site	**Low** – Could capture up to 15 TAF local runoff, but effectiveness would depend on expansion of the SBA by DWR	**Deleted** – Effectiveness would depend on actions by others; low potential to provide regional benefits; high unit cost compared with other concepts
Construct other local area storage facilities considered as alternatives to the original Los Vaqueros Project	**Moderate** – Various sites could provide small to moderate increase in local storage	**Deleted** – Major site acquisition issues; high likelihood of local opposition; high unit cost
Construct new conservation storage in Sacramento River/San Joaquin River watersheds	**Low** – Various sites could provide small to moderate storage outside the project study area	**Deleted** – Low potential to address project planning objectives; most promising sites evaluated by ongoing CALFED studies
Construct new conservation storage in the Sacramento-San Joaquin Delta	**Low** – Uncertainty regarding ability to provide water supply reliability benefits to the project study area	**Deleted** – Low potential to address project planning objectives; most promising sites evaluated by ongoing CALFED studies
Reservoir System Reoperation		
Increase effective conservation storage space in existing Lake Del Valle Reservoir	**Low** – Small potential to provide water supply reliability benefits to the project study area without affecting other reservoir functions	**Deleted** – Low potential to provide regional water supply reliability benefits; high unit cost compared with other concepts
Improve Delta export and conveyance capability through coordinated CVP and SWP operations	**Low** – Limited potential for additional reoperation benefits beyond current plans	**Deleted** – Joint Point of Diversion and other system efficiency improvement concepts are being actively pursued in other programs

TABLE B-1 (Continued)
INITIAL CONCEPTS ADDRESSING BAY AREA WATER SUPPLY RELIABILITY

Initial Concept	Potential to Address Project Objective	Status and Rationale
Groundwater Storage		
Develop additional groundwater banking in San Joaquin River watershed	**Low** – Existing banks have sufficient capacity to store unused contract supplies; uncertainty regarding ability to secure additional supplies for banking and withdrawal limitations	**Deleted** – Existing Bay Area programs sufficient to store unused contract water; limited available capacity in current and planned banks
Develop additional groundwater banking in Sacramento River watershed	**Low** – Significant physical limitations to banking in Sacramento River watersheds	**Deleted** – Low likelihood of developing a reliable conjunctive-use program for Bay Area supplies in the Sacramento River basin due to significant physical, groundwater, and other related problems
Conveyance/System Modifications		
Increase Delta diversion capacity to Bay Area water agency facilities	**Moderate** – Increased export capacity could provide water supply reliability benefits, particularly in combination with storage	**Retained** – Additional Delta diversion capacity with enlarged capacity at existing site and/or new central Delta diversion likely to be effective when used in combination with reoperation and/or new storage
Construct intertie from SFPUC to the SBA	**Low** – Uncertainty regarding availability of Hetch Hetchy supplies and ability to provide regional benefits	**Deleted** – Low potential to contribute to overall water supply reliability conditions in the project study area; could be independently implemented; would have limited contribution to other project planning objectives
Expand use of Freeport Regional Water Project	**Low** – Little potential to improve water supply reliability because benefits would be limited to surplus project capacity during wet periods	**Deleted** – Very high capital and unit costs; benefits would be limited primarily to wet years
Increase Banks Pumping Plant capacity to greater than 8,500 cfs	**Low** – Limited potential to benefit water supply reliability in the project study area due to physical and regulatory constraints on increased exports	**Deleted** – Limited potential for increased water supply reliability in the project study area; limited potential to contribute to other project planning objectives
Construct an intertie from Los Vaqueros Reservoir to the SBA upstream from Dyer Canal	**Moderate** – Could provide water supply reliability benefits to South Bay water agencies with reoperation or expansion of Los Vaqueros	**Retained** – New conveyance from Los Vaqueros Reservoir to the SBA could be an important component of reservoir expansion action
Construct intertie from Los Vaqueros Reservoir to the SBA via Bethany Reservoir	**Low** – Although this measure could provide water supply reliability benefits to South Bay water agencies similar to the previously described Dyer Canal intertie, it would be much more costly because of increased pumping from Bethany Reservoir	**Deleted** – An SBA intertie at Bethany Reservoir was deleted as a measure for water supply reliability due to estimated high operations and maintenance costs; **Retained** – As a measure for plans focused on developing water supplies for environmental water management
Source Water Treatment Improvement		
Implement treatment/supply of agricultural drainage water	**Low** – Uncertain ability to treat agricultural runoff to a quality standard acceptable to the public	**Deleted** – Very costly; low certainty of success; likely low acceptability by stakeholders and general public

TABLE B-1 (Continued)
INITIAL CONCEPTS ADDRESSING BAY AREA WATER SUPPLY RELIABILITY

Initial Concept	Potential to Address Project Objective	Status and Rationale
Source Water Treatment Improvement (cont.)		
Construct desalination facility	**Moderate** – Potential to provide base water supply but would require storage to provide dry-year water supply reliability benefits	**Retained** – Limited application as a dry-year supply; high unit cost; potential environmental impacts from treatment byproducts; potential to provide benefits in combination with storage
Demineralize poor quality groundwater	**Low** – Limited groundwater resources in the project study area suitable for additional development; highly localized benefits	**Deleted** – High implementation costs; limited application and benefits; potential for adverse impacts to groundwater resources
Water Use Efficiency		
Implement additional wastewater reclamation	**Low** – Could provide localized water supply reliability benefits, limited by acceptable uses of recycled water	**Deleted** – Measure being actively pursued by other CALFED Programs and by individual agencies in the Bay Area
Implement additional demand management facilities	**Low** – Low potential to significantly address dry-year water supply reliability over and above existing/planned conservation programs	**Deleted** – Would not effectively address project planning objectives and constraints/criteria; features being actively pursued by other CALFED Programs and by individual agencies in the Bay Area[1]

ACWD = Alameda County Water District
Bay Area = San Francisco Bay Area
CALFED = CALFED Bay-Delta Program
cfs = cubic foot (feet) per second
CVP = Central Valley Project
DWR = Department of Water Resources
SBA = South Bay Aqueduct
SFPUC = San Francisco Public Utilities Commission
SCVWD = Santa Clara Valley Water District
SWP = State Water Project
TAF = thousand acre-feet

1 Ongoing conservation programs in Bay Area are included in the No Project/No Action Alternative

Initial Concepts Addressing Environmental Water Management

Table B-2 lists the initial concepts related primarily to addressing the environmental water management objective (one of the primary objectives) and the results of the evaluation of these concepts.

TABLE B-2
INITIAL CONCEPTS ADDRESSING ENVIRONMENTAL WATER MANAGEMENT

Resource Management Measure	Potential to Address Project Objective	Status and Rationale
Enlarge Los Vaqueros Reservoir to store environmental water supplies	**High** – Could store up to 400 TAF of surplus Delta flows or transfer water for environmental water management	**Retained** – High potential to provide water supplies for environmental water management
Raise Los Vaqueros Dam in-place to store environmental supplies	**High** – Could store up to 175 TAF of surplus Delta flows or transfer water for environmental uses	**Retained** – High potential to provide water supplies for environmental water management
Construct an intertie from Los Vaqueros Project to the SBA via Bethany Reservoir	**High** – Could be used to deliver replacement water supplies for the EWA or similar program. Most effective when combined with expanded storage in Los Vaqueros Reservoir and/or increased Delta intake capacity	**Retained** – Connection to the SBA could be an integral component in enlargement of Los Vaqueros for environmental water purposes; an intertie to Bethany Reservoir could also provide operational flexibility
Construct an intertie from Los Vaqueros Project to the SBA upstream from Dyer Canal	**Moderate to High** – Could be used to provide replacement supplies for the EWA or similar program, via delivery to the South Bay water agencies; most effective when combined with expanded storage at Los Vaqueros Reservoir	**Retained** – Connection to the SBA could be an integral component in enlargement of Los Vaqueros Reservoir; deliveries via this measure would be limited by the existing capacity of the SBA and demands of its users

Delta = Sacramento/San Joaquin River Delta
EWA = Environmental Water Account
SBA = South Bay Aqueduct
TAF = thousand acre-feet

Initial Concepts Addressing Water Quality

Table B-3 lists the initial concepts related primarily to the improving delivered water quality to the Bay Area (secondary objective). Of the five concepts that were identified, one was retained for possible inclusion in initial plans. Note that many of the initial concepts that address water supply reliability (Table B-1) also address improvements to water quality.

Initial Concepts Retained for Further Development

The initial concepts that were carried forward to the next step—initial plan development—are listed in **Table B-4**.

TABLE B-3
INITIAL CONCEPTS ADDRESSING WATER QUALITY

Resource Management Measure	Potential to Address Project Objective	Status and Considerations
Implement point-of-use water quality actions	**Low** – Difficult to implement over the entire project study area	**Deleted** – Likely very high costs to implement and maintain; marginal benefits
Rehabilitate Franks Tract for water quality improvement	**Moderate** – Some potential to improve water quality during certain periods at some existing Delta diversions	**Deleted** – Being pursued by others; unlikely to contribute to other project planning objectives
Cover open channel sections of the SBA	**Moderate** – Would benefit the South Bay water agencies during certain periods	**Deleted** – Low potential to contribute to other project planning objectives; could be pursued independently
Improve Bay Area water treatment plants	**High** – Potential to significantly improve treatment processes and delivered water quality	**Deleted** – Low potential to contribute to other project planning objectives; could be pursued independently by individual agencies
Reoperate an enlarged Los Vaqueros Reservoir or other project study area systems to improve water quality	**High** – Potential to improve water quality for CCWD and the South Bay water agencies, particularly combined with enlarged diversion and storage capacity	**Retained** – High potential to address area water quality conditions; could contribute to other project planning objectives

Bay Area = San Francisco Bay Area
CCWD = Contra Costa Water District
Delta = Sacramento-San Joaquin Delta
SBA = South Bay Aqueduct

Bay Area Water Conservation

As described above, initial concepts related to water use efficiency, such as additional water conservation and recycled water use, were not carried forward beyond Step 1. In general, substantial programs are already in place at each Bay Area water agency to improve water use efficiency. Additional efforts in these concepts would not contribute to the two primary objectives defined for the project: environmental water management and water supply reliability. Further reducing Bay Area water agency demand for Delta water would result in a very small decrease in Delta diversions and the associated environmental water benefit. Additional water conservation without storage to hold water for dry years would provide little benefit in dry years and reduce the effectiveness of drought management (rationing) programs that most Bay Area water agencies would rely on to maintain deliveries through extended drought periods.

The Bay Area water agencies have extensive water conservation and efficiency programs in place that are considered part of the No Project/No Action Alternative. Even though the population of the Bay Area has increased nearly 17 percent since 1986, water use has actually decreased by 1.4 percent during the same period. During the drought period from 1987 to 1992, Bay Area conservation measures helped reduce water use by more than 20 percent. Despite continued growth since then, overall water use remains below pre-drought levels (BAWAC, 2003).

TABLE B-4
INITIAL CONCEPTS RETAINED

Project Objectives	Resources Management Measure Retained	
Primary Objectives		
Bay Area Water Supply Reliability	Enlarge Los Vaqueros Reservoir	Increase conservation storage space in Los Vaqueros Reservoir by up to 400 TAF through removing and replacing the existing dam with a substantially larger facility
	Raise Los Vaqueros Dam in-place	Raise the height of the existing Los Vaqueros Dam to increase conservation storage space by up to 175 TAF
	Increase Delta diversion capacity	Increase the capacity of Delta diversion(s) to Bay Area water agencies
	Construct an intertie from Los Vaqueros Project to the SBA upstream from Dyer Canal	Construct new conveyance to deliver water from Los Vaqueros Reservoir to the SBA upstream from Dyer Canal
	Construct desalination plant	Develop desalination facility, drawing from Bay-Delta Estuary and associated conveyance facilities
Environmental Water Management	Enlarge Los Vaqueros Reservoir	Enlarge Los Vaqueros Reservoir by up to 400 TAF to store surplus Delta flows for environmental use
	Raise Los Vaqueros Dam In-Place	Raise the height of the existing Los Vaqueros Dam, increasing storage by up to 175 TAF, to store surplus Delta flows for environmental use
	Construct an intertie from Los Vaqueros Project to the SBA via Bethany Reservoir	Construct a new pipeline to deliver environmental supplies from the Los Vaqueros Project to Bethany Reservoir
	Construct an intertie from Los Vaqueros Project to the SBA upstream from Dyer Canal	Construct new conveyance to deliver water from Los Vaqueros Reservoir to SBA upstream from Dyer Canal
Secondary Objective		
Bay Area Water Quality	Reoperate reservoir/delivery	Reoperate an enlarged Los Vaqueros Reservoir and/or delivery system to improve delivered water quality

Bay Area = San Francisco Bay Area
Bay-Delta Estuary = San Francisco Bay/Sacramento-San Joaquin Delta Estuary
Delta = Sacramento-San Joaquin Delta
SBA = South Bay Aqueduct
TAF = thousand acre-feet

The Bay Area water agencies plan to continue conservation efforts into the future. The agencies plan to save 150 thousand acre-feet (TAF) per year from a variety of conservation measures, including plumbing retrofits, rebates for efficient toilets and appliances, and residential, commercial and industrial surveys and incentives. As the agencies implement these conservation measures, the flexibility to further reduce water use in dry periods is lost. For example, with a 5-gallon-per-flush toilet, users could install a displacement device in the toilet during dry years to reduce use. Today and in the future, with more 1.6-gallon-per-flush toilets installed, there is little ability to reduce water use for toilet flushing. Similarly, with more xeriscape plants and efficient landscape irrigation installed, the water savings in dry years from reduced landscape irrigation is less. (BAWAC, 2003).

Step 2: Initial Plans

In Step 2, the initial concepts retained from Step 1 were used in combination to develop the initial plans, which were then evaluated per the project objectives, purpose, need, principals, and guidelines described above. Because a large array of potential concept combinations and sizes existed, the approach was not to develop an exhaustive list of all possible plans or to optimize outputs. Rather, the purpose was (1) to explore different strategies to address the planning objectives, constraints, principles, and criteria, and (2) to identify initial plans that may warrant further development into comprehensive alternatives.

The plans described in this chapter represent a range of potential actions to address the project objectives. The initial plans focused on a single primary objective, either the environmental water management or Bay Area water supply reliability. A third set of plans included a mixture of concepts to address all of the planning objectives, referred to as "combined objective plans."

Overview of Initial Plans

The retained initial concepts were packaged into eight initial plans formulated to facilitate comparison of a broad range of potential actions. The initial plans were not complete alternatives but represented fundamentally different ways of combining the retained initial concepts to address specific objectives. The initial plans are shown in **Table B-5**, organized by the objective(s) the plan is designed to meet.

Facilities Associated with Enlarging Los Vaqueros Reservoir

Three major components were associated with enlarging Los Vaqueros Reservoir for the purpose of either increasing Bay Area water supply reliability or providing environmental water supplies:

- Constructing new and modifying existing Delta intake(s), pumping, and conveyance facilities to the reservoir, and constructing a small balancing reservoir
- Raising Los Vaqueros Dam and increasing the size of Los Vaqueros Reservoir
- Constructing pumping and transmission facilities from Los Vaqueros Reservoir to the SBA or Bethany Reservoir

During this step, a variety of potential reservoir sizes was considered and represented increases in the current capacity of 25 TAF to 400 TAF. The 25-TAF increase corresponded to a dam raise of about 15 feet, the estimated maximum height the existing structure could be raised without major reconstruction. It was projected that larger dam raises would require removal of the existing dam and construction of a new dam a short distance from the existing facility.

TABLE B-5
SUMMARY OF INITIAL PLAN FEATURES

Initial Plans	Initial Concepts						
	Raise Los Vaqueros Dam in place	Enlarge Los Vaqueros Reservoir	Enlarge Delta Pumping/ Conveyance	Los Vaqueros with Dyer Canal Intertie	Los Vaqueros-Bethany Res. Intertie	Desalination Plant	Water Quality Reoperation
Bay Area Water Supply Reliability Focus							
1. Raise Los Vaqueros Dam In-Place	✔		✔	✔			
2. Enlarge Los Vaqueros Reservoir		✔	✔	✔			
3. Desalination with Storage (Enlarge Los Vaqueros Reservoir)		✔	✔	✔		✔	
Environmental Water Management Focus							
4. Enlarge Los Vaqueros Reservoir with Dyer Canal Intertie		✔	✔	✔			
5. Enlarge Los Vaqueros Reservoir with Bethany Reservoir Intertie		✔	✔		✔		
Combined Objective Focus							
6. Water Supply Reliability/Improved Environmental Water Management Combination with Dyer Canal Intertie		✔	✔	✔			
7. Water Supply Reliability/Improved Environmental Water Management Combination with Bethany Reservoir Intertie		✔	✔		✔		
8. Water Supply Reliability/Improved Environmental Water Management Combination with Water Quality Improvements		✔	✔	✔			✔

Initial Plans Focused on Bay Area Water Supply Reliability

Three initial plans focus on improving water supply reliability for Bay Area water agencies. These initial plans represent three fundamentally different strategies to address the water supply reliability objective using various combinations of the retained concepts: a small dam raise strategy, a major reservoir expansion strategy, and a regional desalination strategy. Because the plans that focus on Bay Area water supply reliability also include diverting water from the Delta during surplus flow conditions, when water quality is typically good, the plans also would provide water quality benefits.

1 – Raise Los Vaqueros Dam In-Place for Bay Area Water Supply Reliability

The focus of this initial plan is on increasing water supply reliability through a small raise of the existing Los Vaqueros Dam. Initial studies indicate that the existing dam could be raised by as much as 15 feet, without major reconstruction, to create up to 25 TAF of additional storage. Diversion and conveyance capacity from the Delta to the enlarged reservoir would be increased by maintaining the existing pumping capacity at Old River of 250 cubic feet per second (cfs) and constructing an additional diversion and pumping facility in the central Delta of about 500 cfs. Total Delta diversion capacity under this initial plan would be about 750 cfs. Conveyance facilities including a pump station near the outlet of the expanded reservoir and a pipeline to the SBA near the Dyer Canal Back Surge Pool would be constructed.

The additional storage would improve dry-year water supply reliability for Bay Area water agencies, including CCWD and the South Bay water agencies. The increase in Delta diversion capacity identified for this initial plan was selected because it appeared to result in the lowest cost per unit of increased water yield of the diversion capacities considered.

2 – Enlarge Los Vaqueros Reservoir for Bay Area Water Supply Reliability

This initial plan includes an expansion of Los Vaqueros Reservoir to 500 TAF. It would require demolishing the existing dam and constructing a larger dam capable of storing as much as 400 TAF in addition to the existing 100-TAF Los Vaqueros Reservoir (total storage of 500 TAF). Similar to Initial Plan 1, surplus Delta flows would be conveyed to the expanded reservoir, and water would be delivered to SBA through a new pump station, pipeline, and intertie to the Dyer Canal. This plan would improve dry-year water supply reliability for CCWD and the South Bay water agencies. The facility sizes selected for this initial plan were shown in preliminary operations modeling to more efficiently contribute to the primary objective of water supply reliability than other sizes evaluated.

3 – Desalination with Storage (Enlarge Los Vaqueros Reservoir) for Bay Area Water Supply Reliability

The focus of this initial plan is on increasing water supply reliability through construction of a new regional water desalination facility in the Bay Area in combination with new storage and delivery facilities. For purposes of this initial plan, the plant was assumed to be a single brackish water desalination plant located at, or near, the Mirant Pittsburgh site identified by the Bay Area Regional Desalination Project. New conveyance facilities would include transmission facilities from the desalination plant to the existing CCWD Neroly Blending Facility and a pumping station and pipeline from that location to Los Vaqueros Reservoir.

Los Vaqueros Dam would be reconstructed and enlarged to store as much as 500 TAF and the diversion and conveyance capacity from the Delta to Los Vaqueros Reservoir would be increased from 250 cfs (existing at Old River) to 750 cfs (total capacity). Similar to previous plans, deliveries would be made from Los Vaqueros Reservoir to the SBA via a new pump station, pipeline, and intertie to the Dyer Canal.

Initial Plans Focused on Environmental Water Management

Two initial plans were formulated to address the primary project objective of developing water supplies for environmental water management. Each includes diverting surplus flows from the Delta to an expanded Los Vaqueros Reservoir and constructing delivery facilities to CVP and SWP water users affected by environmental water pumping curtailments. The facilities associated with these plans would generally be similar to those described for Initial Plan 2. In both of the environmental water-focused initial plans, deliveries would be made to the SBA from the expanded reservoir facilities; the resulting pumping reductions at the CVP and SWP Delta pumping plants then could be used either to deliver environmental water supplies south of the Delta or to directly accommodate environmental fish actions (pumping curtailments) at the export facilities. At this stage of alternatives development, environmental benefits were primarily seen as resulting from using the enlarged Los Vaqueros Reservoir and related facilities in conjunction with the CALFED Environmental Water Account (EWA) Program, or a similar program that provided water for environmental uses while keeping municipal, industrial and agricultural water users whole. As the alternatives development process progressed, and the long-term status of the EWA became uncertain, the alternatives were refined to provide a broader base of environmental water management benefits that are described in Chapter 3 and Sections 4.2 and 4.3 of the Draft EIS/EIR. The evaluation of alternatives at the Initial Plan step included comparisons of how effectively an alternative provides EWA or EWA-like benefits as shown in Table B-2 Initial Concepts Addressing Environmental Water Management and Table B-6 Summary Comparison of Initial Plans.

Initial Plans 4 and 5, described below, are similar; however, the first delivers water from Los Vaqueros Reservoir to the SBA near the Dyer Canal Back Surge Pool, and the second delivers water to Bethany Reservoir.

4 – Enlarge Los Vaqueros Reservoir with Dyer Canal Intertie for Improved Environmental Water Management

This plan is focused on providing water supply for environmental water management through expanding the existing Los Vaqueros Reservoir by as much as 400 TAF (to 500 TAF total) and constructing an intertie between the expanded reservoir and the SBA at the Dyer Canal. Delta diversion and conveyance facilities would be enlarged to fill the expanded reservoir during periods of surplus Delta flow; these supplies would be delivered to the SBA in lieu of CVP and SWP deliveries that could then be used for environmental purposes. The pump station would lift water from the expanded reservoir through a pipeline to the Dyer Canal segment of the SBA.

5 – Enlarge Los Vaqueros Reservoir with Bethany Reservoir Intertie for Improved Environmental Water Management

This initial plan is similar to Initial Plan 4 except that water would be delivered either from the expanded reservoir or directly from enlarging Delta pumping and conveyance facilities to the SWP Bethany Reservoir. Supplies delivered to Bethany from the expanded reservoir via a gravity intertie then would be pumped to the SBA via the existing South Bay Pumping Plant or through the California Aqueduct for other environmental water purposes (such as storage in San

Luis Reservoir). A flow separation structure could prevent higher quality Los Vaqueros supplies delivered to the SBA from mixing with lower quality Bethany Reservoir supplies. Unlike Initial Plan 4, the capacity and demands of the SBA would not restrict environmental water deliveries under this initial plan; additional environmental water supplies could be conveyed south via the California Aqueduct.

Initial Plans Focused on Combined Objectives

Three initial plans were formulated from the retained concepts to address multiple project objectives. The three initial plans provide both water supply reliability and environmental water management benefits. The third plan was also formulated to provide additional water quality benefits. The initial plans all consist of enlarging/reconstructing Los Vaqueros Reservoir to 500 TAF, enlarging associated Delta diversion and conveyance facilities primarily for the purposes of increasing water supply reliability, and developing environmental water supplies.

6 – Water Supply Reliability / Improved Environmental Water Management Combination with Dyer Canal Intertie

This initial plan would provide water supply reliability benefits and improve environmental water management through enlarging the existing Los Vaqueros Reservoir by as much as 400 TAF (to 500 TAF) in combination with a new intertie to the Dyer Canal segment of the SBA. Delta diversion and conveyance capacity would be increased to supply the enlarged reservoir with surplus Delta flows. A portion of the additional storage space would be dedicated to improving dry period water supply reliability for CCWD and the South Bay water agencies, and the remainder would be dedicated to environmental purposes.

7 – Water Supply Reliability / Improved Environmental Water Management Combination with Bethany Reservoir Intertie

Similar to Initial Plan 6, this plan would provide water supply reliability benefits and improve environmental water management. A new intertie would connect the expanded reservoir with Bethany Reservoir. Existing facilities would be used to deliver water supplies from Bethany to CVP and SWP users on the SBA. Unlike Initial Plan 6, the capacity of demands of the SBA would not limit the amount of environmental water supplies that could be developed under this plan.

8 – Water Supply Reliability / Improved Environmental Water Management Combination with Water Quality Improvements

This initial plan would focus on providing water supply reliability and water quality improvements and improved environmental water management. Facilities would be similar to the combined objective Initial Plan 6, including increased Delta diversion and conveyance capacity to the expanded reservoir and an intertie to the Dyer Canal segment of the SBA. Portions of the new storage space in Los Vaqueros Reservoir would be dedicated to Bay Area water supply reliability and environmental water management purposes similar to the previous plans. However, unlike

Initial Plan 6, the reservoir would be operated to provide additional water quality benefits for Bay Area water agencies.

Evaluation of Initial Plans

Federal Economic and Environmental Principles and Guidelines

To help focus the plan formulation process and develop the most appropriate detailed plans to be considered for implementation, the eight initial plans were compared using four general criteria - completeness, effectiveness, efficiency, and acceptability - based on the federal P&Gs as described above.

Completeness. Completeness is a determination of the extent to which a given alternative plan provides and accounts for all necessary investments or other actions to ensure the realization of planned effects. Each alternative is given a completeness ranking ranging from low to high, depending primarily on the degree of uncertainty (or reliability) of achieving the intended objectives and adequately mitigating significant adverse impacts.

Effectiveness. Effectiveness is the extent to which an alternative plan would alleviate problems and achieve objectives. For example, in the case of water supply reliability or water quality objectives, effectiveness may be considered in terms of a measured increase in water supply reliability or the ability to achieve a specific water quality goal, respectively.

Efficiency. Efficiency is the extent to which an alternative plan is the most cost-effective means of alleviating specified problems and realizing specified opportunities, consistent with protecting the nation's environment. Some potential ways to evaluate efficiency include comparing dollars per unit of economic benefit, least-cost of attaining a given objective, and lower opportunity cost relative to the accomplishment of other alternatives.

Acceptability. Acceptability is the workability and viability of the alternative plan with respect to acceptance by state and local entities and the public, and compatibility with existing laws, regulations, and public policies. Acceptability may be evaluated according to a plan's ability to be implemented within existing laws and policies; consistency with stated project principles; or the potential for broad-spectrum acceptance or support.

Costs, implementation costs, and annual costs of the initial plans were also evaluated. The facility sizes represented in the initial plans were selected to provide a level basis for comparing the plans while also considering apparent trends in the cost effectiveness of various facility combinations.

Table B-6 shows the results of the evaluation of the initial plans.

TABLE B-6
SUMMARY COMPARISON OF INITIAL PLANS

Initial Plans	Comparison Criteria				Further Development Status and Overall Ranking
	Completeness	**Effectiveness**	**Efficiency**	**Acceptability**	
Bay Area Water Supply Reliability Focus					
1 – Raise Los Vaqueros Dam In-Place for Bay Area Water Supply Reliability	Could be physically implemented with minimal impacts; would not require future elements; would be consistent with study authorization; and would address water supply reliability objective.	Potential to provide nearly 30 percent of the 2020 drought period shortages for Bay Area water agencies.	Lowest implementation cost but lower drought period yield. Low cost per unit of output compared with other plans focused on water supply reliability.	Consistent with goals of CALFED.	Although lower yield, **retained** for further development because of very low implementation cost.
	High	*Low*	*Moderate*	*High*	*Moderate*
2 – Enlarge Los Vaqueros Reservoir for Bay Area Water Supply Reliability	Could be physically implemented; would not require future elements; would be consistent with study authorization; and would address water supply reliability objective.	Potential to provide almost 65 percent of the 2020 drought period shortages for Bay Area water agencies.	Moderate yield but higher cost per unit of output for water supply reliability than Initial Plan 1.	Consistent with goals of CALFED.	**Retained** for further development because of potential to significantly address water supply reliability for Bay Area.
	High	*Moderate*	*Moderate*	*High*	*Moderate-High*
3 – Desalination with Storage (Enlarge Los Vaqueros Reservoir) for Bay Area Water Supply Reliability	Could be physically implemented; would be consistent with study authorization; and would address water supply reliability objective. Increased uncertainty relating to reliability and efficiency to implement and maintain desalination facilities and mitigate for brine disposal impacts.	Potential to provide about 75 percent of the 2020 drought period shortages for Bay Area water agencies.	Highest yield but also the highest cost per unit of output for water supply reliability.	Consistent with goals of CALFED; may be difficult to mitigate byproducts (brine) to a level acceptable to other Bay Area water resources interests.	**Deleted** from further development as a stand-alone alternative primarily because of highest cost per unit of water supply developed of any plan considered and because of inability to further other project objectives.
	Moderate	*Moderate*	*Low - Moderate*	*Moderate*	*Low-Moderate*
Environmental Water Management Focus					
4 – Enlarge Los Vaqueros Reservoir with Dyer Canal Intertie for Improved Environmental Water Management	Could be physically implemented; would not require future elements; would be consistent with study authorization; and would address the environmental water management objective.	Potential to replace more than 60 percent of average annual EWA water acquisition target.	Moderately high cost per unit of output for relatively low environmental water supply.	Consistent with goals of CALFED; potential for federal interest in the environmental water management objective.	**Retained** for further development, although at this time, does not appear to be as efficient as Initial Plan 5 (with intertie to Bethany Reservoir).
	High	*Low-Moderate*	*Moderate*	*Moderate-High*	*Moderate*
5 – Enlarge Los Vaqueros Reservoir with Bethany Reservoir Intertie for Improved Environmental Water Management	Could be physically implemented; would not require future elements; would be consistent with study authorization; and would address the environmental water management objective.	Potential to replace about 85 percent of average annual EWA water acquisition target.	Moderate cost per unit of output for environmental water supply and highest yield of the initial plans.	Similar to Initial Plan 4.	**Retained** for further development primarily because it would result in the largest potential environmental water supply.
	High	*Moderate-High*	*Moderate*	*Moderate-High*	*Moderate-High*

TABLE B-6 (Continued)
SUMMARY COMPARISON OF INITIAL PLANS

Initial Plans	Comparison Criteria				Further Development Status and Overall Ranking
	Completeness	**Effectiveness**	**Efficiency**	**Acceptability**	
Combined Objectives Focus					
6 – Water Supply Reliability/Improved Environmental Water Management Combination with Dyer Canal Intertie	Could be physically implemented; would not require future elements; would be consistent with study authorization; and would address primary objectives.	Potential to provide more than 20 percent of the 2020 drought period shortages for Bay Area water agencies and replace more than 60 percent of average annual EWA water acquisition target.	Relatively low drought period yield and EWA replacement supplies with low to moderate cost per unit of output for both water supply reliability and EWA.	Consistent with goals of CALFED; potential for federal interest in environmental water management objective.	Although relatively low yields, **retained** for further development because of low to moderate costs per unit of output for both supply reliability and environmental water supply.
	High	*Moderate*	*Moderate-High*	*High*	*High*
7 – Water Supply Reliability/Improved Environmental Water Management Combination with Bethany Reservoir Intertie	Could be physically implemented; would not require future elements; could be consistent with study authorization; and would address primary objectives.	Potential to provide about 15 percent of the 2020 drought period shortages for Bay Area water agencies and replace nearly 80 percent of average annual EWA water acquisition target.	Similar to Initial Plan 6.	Similar to Initial Plan 6.	**Retained** for further development primarily because it would result in the lowest cost for environmental water supply, and high potential for federal interest.
	High	*Moderate-High*	*Moderate-High*	*High*	*High*
8 – Water Supply Reliability/Improved Environmental Water Management Combination with Water Quality Improvements	Could be physically implemented; would not require future elements; reduced certainty of improving water quality conditions under all circumstances; would be consistent with study authorization; and would address all objectives.	Potential to provide nearly 30 percent of the 2020 drought period shortages for Bay Area water agencies and replace about 40 percent of average annual EWA water acquisition target. Also would provide a significant improvement in SBA water quality.	Overall highest cost per unit of water supply reliability and EWA replacement output of combination plans considered.	Consistent with plan in CALFED ROD; potential for federal interest.	**Retained** for further development primarily because it would be consistent with the plan in the CALFED ROD and balance project objectives.
	High	*Moderate*	*Low-Moderate*	*High*	*Moderate-High*

KEY: Bay Area = San Francisco Bay Area
CALFED = CALFED Bay-Delta Program
EWA = Environmental Water Account
ROD = Record of Decision
SBA = South Bay Aqueduct

Initial Plans Selected

After evaluating each initial plan per the planning criteria and analyses described above, seven plans were selected for further investigation. Initial Plan 3 (Desalination with Storage (Enlarge Los Vaqueros Reservoir) for Bay Area Water Supply Reliability) was not selected for further development as a stand-alone alternative due primarily to higher construction and operations costs. Energy costs for operating a desalination facility are highly variable and sensitive to market changes. Additionally, desalinated water stored in the reservoir for later use would require a re-treatment process before being delivered to Bay Area water agencies. The environmental impacts of a desalination facility were also somewhat prohibitive because of the large quantity of brine waste and increased water temperature, which would be introduced into the Delta environment, resulting in biological impacts. As outlined in the Other Initial Plan Analyses section below, desalination without new storage was considered but not moved forward for various reasons.

The seven initial plans (plus No Project/No Action) that were selected for more detailed evaluation are:

- **No Project/No Action.** No further action would be taken by Reclamation and CCWD to resolve the identified water resources problems and needs in the project study area.

- **1 – Raise Los Vaqueros Dam In-Place for Bay Area Water Supply Reliability.** Raise the existing Los Vaqueros Dam in-place with increased Delta diversion and conveyance capacity and an intertie with the SBA at the Dyer Canal, primarily to improve Bay Area water supply reliability during dry periods.

- **2 – Enlarge Los Vaqueros Reservoir for Bay Area Water Supply Reliability.** Reconstruct and enlarge Los Vaqueros Reservoir with increased Delta diversion and conveyance capacity and an intertie with the SBA at the Dyer Canal, primarily to improve Bay Area water supply reliability during dry periods.

- **4 – Enlarge Los Vaqueros Reservoir with Dyer Canal Intertie for Improved Environmental Water Management.** Reconstruct and enlarge Los Vaqueros Reservoir with increased Delta diversion and conveyance capacity and an intertie with the SBA at the Dyer Canal, primarily to develop environmental water replacement supplies.

- **5 – Enlarge Los Vaqueros Reservoir with Bethany Reservoir Intertie for Improved Environmental Water Management.** Reconstruct and enlarge Los Vaqueros Reservoir with increased Delta diversion and conveyance capacity and an intertie with Bethany Reservoir, primarily to develop environmental water supplies.

- **6 – Water Supply Reliability / Improved Environmental Water Management Combination with Dyer Canal Intertie.** Reconstruct and enlarge Los Vaqueros Reservoir with increased Delta diversion and conveyance capacity and an intertie with the SBA at the Dyer Canal to improve Bay Area water supply reliability and develop environmental water supplies.

- **7 – Water Supply Reliability / Improved Environmental Water Management Combination with Bethany Reservoir Intertie.** Reconstruct and enlarge Los Vaqueros Reservoir with increased Delta diversion and conveyance capacity and an intertie with

Bethany Reservoir to improve Bay Area water supply reliability and develop environmental water supplies.

- **8 – Water Supply Reliability / Improved Environmental Water Management Combination with Water Quality Improvements.** Reconstruct and enlarge Los Vaqueros Reservoir with increased Delta diversion and conveyance capacity and an intertie with the SBA at the Dyer Canal to improve Bay Area water supply reliability, develop environmental water supplies, and improve the quality of delivered water supplies.

Other Initial Plan Analyses

Moderate In-Place Dam Raise (275-TAF Reservoir Expansion)

In September 2006, taking into consideration engineering studies and analyses and further refinement of the operations modeling and cost estimates, it was determined that a reservoir expansion to 275 TAF was the preferred reservoir expansion size.

Engineering studies and analysis determined that it would be possible to raise the existing dam in-place to achieve a moderate reservoir expansion of up to 275 TAF total capacity, versus the initial plans for either a mini in-place dam raise (up to 115 TAF total capacity) or a major reservoir expansion (up to 500 TAF total capacity, requiring demolition of the existing dam). This dam raise scenario has the potential for cost savings over large expansion scenarios because portions of the existing dam structure, inlet/outlet, and associated facilities could be preserved, and a portion of the foundation of the existing dam left intact. Dewatering the reservoir would be required during construction, similar to the major reservoir expansion scenarios.

The *Initial Economic Evaluation for Plan Formulation Report* considered the benefits and costs of a 275-TAF reservoir expansion, and the conclusion was reached that the alternative was potentially economically feasible (Reclamation, 2006). It included the following major facilities:

- Reconstruct the existing Los Vaqueros Dam in place to create a reservoir with a total capacity of 275 TAF.
- Expand the existing Old River Intake and Pump Station by 170 cfs to a total capacity of 420 cfs (note that the existing facility has a current capacity of 250 cfs and a planned build out capacity of 320 cfs, total).
- Construct new conveyance from the expanded Old River Intake and Pump Station to the existing Transfer Facility, and from the existing Transfer Facility to the expanded reservoir
- Enlarge the Transfer Facility balancing reservoir and increase Transfer Facility pumping capacity.
- Construct a new pump station, pipeline, and delivery intertie to connect Los Vaqueros Reservoir to the SBA upstream from Dyer Canal.

Larger (than 275-TAF) reservoir expansion options up to 500 TAF were eliminated by subsequent operational analyses that determined that Bay Area water supply reliability

demands and environmental water demands did not warrant the higher cost associated with demolishing the existing dam and building a new facility. Operational analyses also indicated that the volume of new storage would not be the sole limiting factor in developing environmental water management benefits. Availability of Delta surplus, potential restrictions on Delta pumping due to water quality or fisheries impacts, timing and location needs for environmental water, potential SBA water supply reliability beneficiaries, and availability of space for environmental water in storage facilities south of the Delta would all exert influence on project operations and yield. As a result, the comprehensive plans described in the next section do not consider expansion of Los Vaqueros Reservoir to greater than 275 TAF.

Desalination without New Storage

Although Initial Plan 3 (Desalination with Storage (Enlarge Los Vaqueros Reservoir) for Bay Area Water Supply Reliability) was dropped from the eight initial plans (see Initial Plans Selected section above), it was thought that desalination could still be a viable alternative component. Consequently, a scenario was identified that would involve constructing a new, brackish water desalination plant drawing water from Mallard Slough and located adjacent to the existing Randall-Bold Water Treatment Plant. Potential benefits/accomplishments were:

- High quality water from the desalination plant to enable CCWD to meet water quality goals in lieu of receiving water supplies from Los Vaqueros Reservoir.
- Desalinated supplies blended with other CCWD supplies in a manner similar to existing conditions.
- Storage space in Los Vaqueros Reservoir (that would otherwise have been exercised to meet CCWD water quality goals) used instead to contribute to environmental water management and Bay Area water supply reliability objectives.
- New intertie, either to Bethany Reservoir or to the SBA upstream from Dyer Canal, to deliver supplies from the reservoir to beneficiaries.

However, through assessment of CCWD's service area and examination of existing infrastructure, it was determined that only about 30 percent of CCWD's demand on Los Vaqueros Reservoir could be offset. After accounting for the emergency storage space that CCWD reserves in the reservoir (40 TAF in dry and critical years and 70 TAF in all other year types), the resulting capacity made available by the desalination facility would be about 10 TAF to 15 TAF, depending on year type—not enough to provide sufficient environmental water management benefit to offset the significant cost of construction and operation. In addition, disposal of concentrated brine waste from the desalination facility (both in terms of the facilities that would be needed to transport the waste and the potential environmental impacts to the receiving estuary) and potential greenhouse gas issues posed challenges. Therefore, it was determined that the desalination without new storage scenario would not be carried forward for further development as an alternative.

Although desalination facilities were not carried forward as an alternative for the reservoir expansion project, the Bay Area water agencies continue to evaluate a regional desalination facility at this location to meet long-term, dry-year water supply reliability needs. This project,

the Bay Area Regional Desalination Project, is a cooperative effort of East Bay Municipal Utility District, SFPUC, SCVWD, and CCWD. While not yet shown to be potentially feasible, such a project may prove feasible in the future, and could complement an expanded Los Vaqueros Reservoir.

Step 3: Alternatives Development and Refinement

As described above, a number of initial concepts were identified and used to formulate a range of initial plans addressing the project planning objectives. The initial plans that were chosen to move forward from Step 2 were selected because of their ability to contribute to the primary project objectives: providing environmental water management benefits and/or Bay Area water supply reliability. The initial plans carried forward from Step 2 eliminated all reservoir size options greater than expansion to 275 TAF. Plans that took into consideration multiple Delta intakes and conveyance options, as well as multiple delivery options to Dyer Canal or Bethany Reservoir, were carried forward.

The initial plans were further evaluated against the planning principles and guidelines established for the project, and additional studies and operations modeling efforts were simultaneously conducted. During evaluation and comparison of the initial plans, various combinations of components, configurations, and operations were identified for further development in detailed alternative plans.

Specifically, the sizing of project intakes, conveyance, and pumping facilities considering operations, benefits, adverse impacts, and costs were evaluated. During this step, it was determined that the South Bay Connection at Bethany Reservoir provided greater potential project benefits than the connection to Dyer Canal. In addition the costs and environmental impacts of the connection to Dyer Canal were greater than those for the connection to Bethany Reservoir. Therefore, the connection to Dyer Canal was dropped from further consideration. All alternatives that include a connection to South Bay water agencies also include the South Bay Connection to Bethany Reservoir.

Additional Plans Considered

Two specific alternative plans were developed and evaluated during this step including a conveyance-only alternative, which was not carried forward as a final alternative, and a smaller 160-TAF reservoir expansion alternative, which is included in the final alternatives evaluated in the Draft EIS/EIR.

Conveyance-only Plan

This plan includes construction of a new intake on Old River, new conveyance facilities from the Delta to the Transfer Facility, and a new pipeline to deliver supplies from the Transfer Facility to Bethany Reservoir. Los Vaqueros Reservoir would not be expanded. Operation of these facilities would provide some environmental water management benefit by moving water to Bethany

through screened diversions, which could also improve water supply reliability to South Bay water agencies by avoiding the CVP and SWP Delta pumps, and could be used to move surplus Delta supplies to Central Valley refuges. However, without the operational flexibility and greater certainty of storage these benefits are limited. Under this plan, there would be less environmental water management benefits and limited water supply reliability benefits compared to alternatives including expansion of Los Vaqueros Reservoir.

This plan was not carried forward as a final alternative because it did not contribute substantially to one of the primary project objectives, providing Bay Area water supply reliability and had less environmental water management benefits. The plan was also the least consistent with the CCWD Board Principles and with the water management objectives set forth in the CALFED ROD. The plan was found to have the least potential for local agency participation.

160-TAF Reservoir Plan

During this review, a new plan was considered that would facilitate CCWD's future plans to secure water transfers for CCWD customers providing supplemental dry-year water supply and reducing the extent of supplemental drought supply acquisition required. CCWD would increase the size of Los Vaqueros Reservoir to 160 TAF. This alternative could be implemented solely by CCWD and specifically addresses water supply reliability planning objectives without requiring new intake or conveyance facilities. This alternative was further refined as a smaller reservoir alternative that could serve CCWD customers and other Bay Area water agencies through existing interties. This alternative was carried forward as a final alternative.

Facilities Siting

In addition to developing and refining project alternatives, alternative facility sites were identified and evaluated for the intake, conveyance, and recreation facilities associated with the alternatives. The purpose of the siting studies was to help define the alternatives, identify location constraints, outline the areas to be evaluated in the EIS/EIR, and potentially avoid environmental impacts. The facilities siting process is described briefly here. Additional information is available in the *Facilities Siting Report* (ESA, 2007).

A number of sources were used to complete the facilities siting analysis, including published literature, recent aerial photographs, geology, soils, and slope stability maps, previous project reports and maps for the Los Vaqueros Watershed, and other publicly available databases such as the *East Contra Costa County Habitat Conservation Plan and Natural Communities Conservation Plan* (ECC HCPA, 2006) and previously recorded cultural resource sites from the Northwest Information Center. The analysis relied heavily on Geographic Information System analysis to determine the range and magnitude of potential effects, to quantify siting results, and to illustrate various facility configurations. Field work was conducted as necessary to complete the siting recommendations.

During the facility siting studies, the alternate sizes and locations were examined for the following facilities to determine the optimal facilities and locations for evaluation in the EIS/EIR:

- New Delta Intake and Pump Station
- Conveyance facilities
- Recreation facilities

In October 2004, analysts visited or viewed all the facility alternatives that were accessible within the Los Vaqueros Watershed or visible from public roads. Facility sites and pipeline alignments were further refined to avoid or minimize environmental impacts or to improve conditions for construction. To achieve a systematic approach to facility siting evaluation, siting criteria were developed for engineering, biological resources, cultural resources, and land use.

Once the preferred reservoir expansion size of 275 TAF was determined, facilities sizing and siting were refined to accommodate a smaller reservoir expansion project; however, much of the analysis conducted previously and summarized in the *Facilities Siting Report* (ESA, 2007) remained relevant and new recommendations to accommodate the smaller project were made. The recommendations were:

- New Delta Intake and Pump Station to be located along the western bank of Old River; approximately 1,000 feet south of the existing pump station or expansion of the existing Old River Intake and Pump Station and associated facilities could occur.

- Balancing reservoir to be located at the existing Transfer Facility (rather than a new, separate site within the watershed as previously proposed).

- Inlet-outlet pipeline to be located generally within the Kellogg Creek Valley; creek corridor including buffer zone to be avoided.

- Stockpile area to be located at the northern end of the Kellogg Creek valley, east of Walnut Boulevard in an upland field.

- Delta-Transfer and Transfer-LV Pipelines to be co-located within the existing easement for the Old River and Transfer pipelines, rather than a separate, new alignment.

- Transfer-Bethany Pipeline alignment to be located generally parallel to Vasco Road to the point where Armstrong Road turns south, following Armstrong Road to the terminus, heading southeast toward the Harvey O. Banks Pumping Plant and then westward to Bethany Reservoir; alignment adjusted to avoid wetlands and sensitive plant areas.

More reconnaissance surveys, required to include a full analysis of certain facilities where full access was not previously available, and to locate access roads, spoil disposal areas, pipeline staging areas, and power facilities, were conducted in 2007–2008. After a review of the surveys, it was determined that the proposed site of the new Delta Intake and Pump Station could be farther south to avoid potential maintenance issues associated with the accumulation of sediments in the channel at the original site. Additionally, two route alternatives for the last 1.5-mile segment of the Transfer-Bethany Pipeline were developed to avoid impacts to vernal pool fairy shrimp (*Branchinecta lynchi*) complexes and burrowing owl (*Athene cunicularia*). These two alternatives include a combination of tunnel and open trench construction.

After a review of the facilities siting analysis, the best apparent alternatives were identified to advance to the next step of analysis. The facility siting process supported a systematic approach to establishing a reduced set of feasible alternatives for detailed EIS/EIR analysis, which are designed to avoid and minimize adverse effects while contributing to project objectives.

Final Alternatives

Plan formulation efforts resulted in definition of the No Project/No Action Alternative and identification of the following four comprehensive alternative plans. These alternatives are described more fully in Chapter 3 of the Draft EIS/EIR.

No Project/No Action Alternative

Under the No Project/No Action Alternative, Reclamation and CCWD would take no action toward implementing a specific plan to develop additional water supplies for environmental water management programs or to help address water supply reliability and quality in the Bay Area.

Action Alternatives

Four action alternatives are summarized below and described in detail in Chapter 3 of the Draft EIS/EIR. **Table B-7** shows the key distinguishing characteristics of the final alternatives. Alternative 1 is considered the Proposed Project for purposes of CEQA and is treated as the Proposed Action for purposes of NEPA. Alternative 1 includes the largest reservoir expansion and greatest extent of associated facilities considered in the Draft EIS/EIR and is designed to meet both of the primary objectives. At the other end of the range, Alternative 4 represents the smallest reservoir expansion with the fewest new or expanded facilities.

- **Alternative 1**– Expanded 275-TAF Reservoir, South Bay Connection, Environmental Water Management and Water Supply Reliability Dual Emphasis
- **Alternative 2** – Expanded 275-TAF Reservoir, South Bay Connection, Environmental Water Management Emphasis
- **Alternative 3** – Expanded 275-TAF Reservoir, No South Bay Connection, Environmental Water Management Emphasis
- **Alternative 4** – Expanded 160-TAF Reservoir, No South Bay Connection, Water Supply Reliability Emphasis

TABLE B-7
ACTION ALTERNATIVES
WITH KEY DISTINGUISHING CHARACTERISTICS

Project Characteristic	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Expanded Reservoir Capacity	275 TAF	275 TAF	275 TAF	160 TAF
Operational Emphasis	Environmental Water Management and Water Supply Reliability	Environmental Water Management	Environmental Water Management	Water Supply Reliability
New South Bay Connection?	Yes, 470 cfs	Yes, 470 cfs	No	No
Intake Facilities	Construct new 170-cfs intake facility on Old River	Construct new 170-cfs intake facility on Old River	Expand existing CCWD intake facilities by 70 cfs	No changes to existing intake facilities
Pipeline Capacity from Intake to Expanded Reservoir	Expand pipeline capacity by 420 cfs to 670 cfs	Expand pipeline capacity by 420 cfs to 670 cfs	Expand pipeline capacity by 320 cfs to 570 cfs	No changes to pipeline capacity

References – Appendix B

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