MONTGOMERY WATSON

Notes

CALFED WQ PB
Meeting Notes

Date 2/14/97

Directives

1. Update on wq program - current status
2. Linkages

Paramaters of Concern

Target Ranges

November Deadline for EIR/EIS is inflexible

CALFED does not alter the roles of regulatory agencies

Costs of all parties will be included in consideration

Numerical criteria - adequacy would be decided @ another level

CALFED Component Refinement Report

Accumulating Comments & respond to them as appropriate

PROJECTS

Criteria
- can't consider a project that would impact the EIR/EIS process

$143M - President's Budget overall

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Notes

(2) CALFED WQTG Meeting Notes Date 2/14/97

After June — projects recd — thrown into hopper w/ other projects

Q — Feasibility of implementing projects that support EIR/EIS

Public Workshop (Bob)

→ POC, Projects, Actns, Target Ranges

→ WQ is ahead of other groups

→ mtgs need closure & consensus for the mtgs so have the mtg & then another mtg to build consensus

- Reps of diff groups need to get together & finalize the consensus

Ted Roefs — who did / does the technical review? - Question the WQTG — Answer - RW

This Fee — Projects - structural or studies?
willing to fund studies - to determine which Actns are cost effective & feasible?

Question from Ted R.
Where do we decide which POCs are most important to address from an ecosystem perspective?
→ Need more technical review by technical people

Answer from RW
- We're forming a team in the future to do this review

Comment
EPA Data Set — Cu reduction impacts on fewer spp

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D—033389

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(3)

CALFED WQ Tg meeting Notes

Date 2/14/97

When we begin linking w/ other groups their more specifics will develop

Q by Dave Ment to reach closure on issues discussed @ meetings? Yes - it will do this - answer by KW

We will address a process for technical review at the April 1, 1997 meeting

- Chris Foe
- Fred Hall

& others interested in participating in technical review committee

→ Criteria need to be defined before we form technical committees to evaluate projects

→ Funding Sources - what are they?

→ POA's addressed & to what degree should be charge of technical committee

→ Comments on selection Criteria for Projects - will be provided to us by end of this month

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D-033390

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(4)

CALFED WQTC Meeting Notes

Notes

Date 2/14/97

After Morning Break

- RW – indivs interested in being part of a technical group to review work should fax their name to RW – need by end of month, preferably sooner
  - task of the tech review team would be to rank the priority of the projects

Relationship betw Ecosystem Group & WQ Group ✓

DICK DANIEL

Focus Area: Delta is focus – probs that manifest themselves in the Delta

- To solve probs in Delta we need to consider the rivers
- Maps of study areas – Delta & lger rivers

Ecosystem Restoration Program Plan (ERRP)

- Focus on habitat & ecosystem issues NOT a single species

→ working on this document right now

Implementation Strategy – schedule of as much as 30 yrs

Indicators

Targets → Developing a Monitoring Program (based on ERP

Actions

Phasing

Monitoring & Mod Tech – aspect of CVPIA

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D–033391

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(5)

CALFED WQTE
Meeting Notes

Notes

Date 2/4/97

- Focused research to understand the system will be part of ~~ERRP~~

- Adaptive Management part of ~~ERRP~~
  - the acquisition of data & dev of insight

- Study Area – upper Sacto & S.J Rivers; SF Bay

- Example Areas in Delta
  - Diking of lands
  - influence of tides, energy exchange – probs since agric & other land use
  - 50,000 acres of reestablished tidal habitat
  - riparian habitat
  - watershed management
  - Key Elements – dev & manage H_2O supplies for wildlife
    → 100,000 ac-ft of yield

- Ex Areas Not Delta
  - Stream habs rest.
  - mine drainage control
  - watershed restoration

- Stn Principles CALFED
  - don't transfer impacts

- Developing ERRP now
  - Working Draft – early April
  - April – Public mtg
  - late Summer – Refined

G:\[illegible]

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(6)

CALFED WATER
Meeting Notes

Notes

Date 2/14/97

Craig Young - Water Use Efficiency Component
↳ Policy Program not a technical program
↳ diff from WQ & ECO pgms.

- Key objs
  - (1) ensure water use effic component in B-D actn
  - (2) ~~emphasize~~ incentive / disincentive based tools + regulatory tools
  - (3) Preserve local flexibility
  - (4) Remove Disincentives & Barriers to efficient water use
  - (5) offer greater help in the planning & financial of local water use man tools

- Water Use Efficiency Common Program

(1) - Physical efficiency
  - Achieving CALFED objs
  - Economic efficiency

(2) Most effic axns taken by local agencies
Support axns . . .
. . .

(3) Ag water use effic Axns
  - water man planning
  - Techn Planning Assistance
  - Funding Assistance
  - ~~Ipa~~ implement management improvements to achieve multiple benefits

GO-95 (10/89)

D-033393

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Notes

DAFED UDTG
Meeting Notes

Date 2/14/97

(7)

Urban Water Use Efficiency — SB15 - need transfer resp

- Urban BMP Imp & Reporting
- Improved urban water management planning
- Funding Assistance
- Technical & planning Assistance

Efficient Use of Environ Diversions

Water Recycling

Water Transfers

3 ben Assurance Mechs

Efficient water use a prerequisite for:

- New ~~DAFED~~ water from the DAFED Prog
- ?
- ?

Ag Assurance Mech

- 2yr voluntary planning & imp
- trigger to planning & Imp Reqs

Urban Assurance Mech

- Expanded role for Urban Council
- Stakeholder effort to recommend mechs

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D-033394

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Notes

(9) CALFED WQTG Meeting Notes Date 2/14/97

Curt Schmutte — levees & channels

1100 miles in Delta of levees

McCormick Williamson, Stuart Tract — flooded

200+ miles ≈ CVP levees — federal

& the rest are non fed levees

2 parts of levee program

1 part prioritizes programs, the other doesn't

AB360 — effective Jan 1 — started implementing emergency response activities

Salinity gradient in Delta is West Delta Islands

— Sherman Island — furthest west

— lose islands — moves salinity gradient into river

Flooding Effects — most islands below sea-level so they are holes not islands

Contra Costa Canal intakes — ↑ salinity when levees fail

subsidence control ~ 2-3 inches/year due to carbon oxidation in peat soils

flood islands periodically ↓ carbon oxidation & ↓ subsidence

Beneficial Reuse — dredge materials to reuse for levee construction

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D-033395

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Notes

(9) CALFED WQ&T Meeting Notes Date 2/14/97

Can safely use dredged material for levees – check to make sure dredge mats not wetland; marine sed's contain salt which can be problematic & preleaching or harvesting salt throughout US – ACE is reusing dredge materials

LTMS – long term management strategy re: levees in the delta

→ Recreation Subteam

→ Channel Island Subteam – Marsha Brookbank

→ Emergency Response Subteam – drafting a workplan

→ Seismic Susceptibility Subteam – Ralph Torres – quantitative risk, long term strategies

→ Beneficial Reuse – Jerry Brins, Bill Croyle } these 2 link to WQ&T

→ Land Subsidence

→ Levee Assa'd Habitat

Water Use efficiency – refers to existing supplies

- making improvements in real management to achieve CALFED objs
  - physical
  - economic
- tailwater recycling may not save water but may have WQ benefits

– if you conserve water will you surrender your water rights?
↳ SB15 a legislature will be addressing this
– costs of vols of water conserved not yet determined – this will be done only for impact analysis

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D-033396

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Notes

(10)

CALFED WQTC
Meeting Notes

Date 2/14/97

Stein Buer – Storage & Conveyance

- many dams, canals, pump stations & tying into CALFED is difficult
- 100 facilities – to narrow down these need selection criteria that are defensible
- Determining costs of facilities – differs a lot – use cost indices & bring the 100 facilities up to the same level but this is a gross estimate
- Balancing competing needs – PWA & stakeholder modelers – how diff uses fit together
- Most imp linkage is Water Quality in Delta – – seawater intrusion – runoff
- Selection of alters on conveyance will integrate several needs

– Physical Inventory of locations
– Environmental Screening
– System Modelling

PW – WP & other groups will meet together from now on to discuss issues

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Notes

CALFED WQTC meeting Notes — Date 2/14/97

(11) After lunch

Carol Hood - linkages

- Components of WQ, water Use Effic, Ecosystem, & Storage & Conveyance

- wetlands creation as an ex)

WQ - wetlands creation as treatment method - ax15, ax20, ax22A&B, ax24

Eco - wetlands creation as habitat enhancement

wetlands issues

WQ

benefits - nutrient, pesticides, metals can be ↓

hazards - bioaccum & toxicity hazards to wildlife, groundwater, Se loading, degradation into haz byprods,

Dick Daniel - linkages - wetlands from Ecosystem Perspective

- focus on Delta so focus on tidal wetlands
- lge scale managed wetlands are not the focus for restoration in Delta - plenty of duck ponds

Colusa Basin Drain - pesticides & herbicides, warm

- ↓ thermal input to Sac R
- ↓ param of concern input to Sac R
- Reuse H2O from drain to grow tomatoes and diversions from Sac to R & improve Sac R WQ

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D-033398

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Notes

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CALFED WPT 6
Meeting Notes

Date 2/14/97

TOC – still good but removed by exports or flushed out
– obj to utilize TOC from islands & upstream areas
to ↑ food chain productivity

Levees & Diversions

– residence time has ↓ w/ ↑ velocities of water & ↓ wetlands
– Alts 2 & 3 can ↑ resid time by ↓ velocity & ↑ wetlands

Tidal wetlands – want to estab ~~in~~ in Yolo Bypass

Yolo Bypass – used to be part of Sac R floodplain –
want to reestab w/ years flow @ all times
– Cache Creek drainage may be providing
Hg into the area – this is a concern

To make fish safe to eat in Bay – Delta would be
a good idea – linkage between areas

Western Res probs will always be part of any
consideration of wetlands rest/use/& development

Floodplain Reestab along SJR for flood control & habitat enhancement

Ecosystem will probably not go further west
than San Pablo Bay
→ San Pablo Bay to Sacramento = tidal influence

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W/o human intervention → wetland/Delta would remain as is

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D-033399

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Notes

(13)

CALFED WQTG
Meeting Notes

Date 2/14/97

Greg Young - Water Use Efficiency as relates to wetlands
- water use effic is more policy ~~oriented~~ than technical
- Consumptive Use - ↑ wetlands means ↑ water use
- Levee control reduces head / flow to wetlands
- Mitigation for seasonal wetland loss due to EWP's - canal lining

Curt Schmutte - levees & channels as relates to wetlands
- Subsidence control
- Hydraulic Detention
- Setting levees back on So. Fork of Mokelumne R
- Conveyance capac ↑ for flood control
↑ marshes for Delta Smelt

Stein Buer - Storage & Conveyance as relates to wetland
- Flood Constrn Impacts on Jurisdictional wetlands
- Levee Setback - could ↓ wetlands for areas below sea level or ↑ wetlands for higher elev. areas
- Consumnes R. Preserve - flooding, need to set back levees & ↑ floodplain
- wetlands ~~that~~ require seasonal flooding

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D-033400

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Notes

(14) ~~CALFED WQTG~~ Meeting Notes Date 2/14/97

Mokelumne R a Consumnes R – braided channels + Channel islands – if ↑ flow can wipe these areas out

CVPIA process – additional flows in area

Water Quality – Delta – alterations in flow are impacted by Δ's in salinity – Suisun Marsh – National Wildlife Refuge – some lakes → need wildlife Refuge
└ urban runoff 16,000 acres provides water to wetlands – maybe a concern pbs → Botulism could result
but redistribute flows to these areas to ↓ concen of pollutants

Question
↑ TOC created by ↑ wetlands could create WQ problem
⇒ How do TOC levels in Delta compare to TOC levels in rest of country? Some areas higher, some lower
└ Florida
⇒ Type of TOC is important +
diff areas have diff types of organic matter
– hydrophobic vs hydrophillic
– diss vs particulate

Bioavail as matter to organisms = bad TOC } Rw response
Not bioavail = bad TOC

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Notes

CALFED WQTG
Meeting Notes

Date 2/14/97

(15)

Dave Sores: How long wetlands can be used for treatment? 8-10 yrs for metals treatment? Big maintenance prbs.

Carol: depends on flow, loading & design

Nigel: same pt could be made for selenium

Fred Lee:
Wetlands - effectiveness depends on season & hydrology

Kissimee River System & wetlands is good ex! for us

Everglades - wetlands not good for removing everything @ all times

French woman

Linda M.: Coupling of wetlands & treatment is probably needed

Bill Cram: Colorado - treatment of mine drainage in wetland creates the wetland as haz waste site

Fred Lee: Yolo Bypass - petting in wetlands right now

Dick Daniel - concerned about creating a haz waste pit by creating wetlands

⇒ Put wetland into Colusa Basin Drain to trap sediment input to Sac R.

Rich Breuer - Use wetlands for ag when no pesticides, metals issues so we can use nutrients - nutrient recycling

Dick Daniel - reuse dredge material for wetlands creation & levee construction

Dick Sores - Fine sed in quiescent areas are the ones that are dredged, not sed in open waters bec they don't

D-033402

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Notes

CALFED WQTG
Meeting Notes

Date 2/14/97

(16)

Dick Daniel
- Ideas for collecting/trapping sed's @ confluence of SJR & Sac R. — is this clean?
- Areas w/o circulation are full of more pollutants

Chris Foe
- need pilot studies to determine whether there is a prob & where clean mats are

DD - How long would this study need?

Fred Lee
DDT & others aren't necess bioavail when dredged but Chloride is a problem

Curt Schmutte
- dredge materials aren't a wq problem
- interested in pursuing sed traps
* - Sediment transport experts to put top a proposal *
SFEI 1995 Report finds substantial toxicity in finer grain sed's in the Bay

Carol Have:
Wetlands for treatment only
wetlands for Polishing Treatment & Ecosystem/Habitat
wetlands for Ecosystem/Habitat only

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D-033403

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Notes

CALFED WQTG
Meeting Notes

Date 2/14/97

(17)

Timed Release Issues - Carol Howe

WQ

- load/concen/flow relationships
- wq improvements hazs it impairments
- Regulatory feasibility

Dick Daniels — Diagram

DO

↑ instream flow in all rivers = goal
- SJ River — problematic (Spring Run extinct)

flow → temp, WQ, habitat effects

THM - probably never be able to elim this source

Long Spring - Water Use-Effic

- Scene Redux
- long term Applied Water Impacts
  - storage ⇒ soil salinity / soil profile → crop prod
- ↓ water flow from impairment ↓ the nuisance by ↓ the size & potential for attracting wildlife

Steve Beer — Storage & Conveyance

hold ditch H2O until high flows

- hold clear H2O to dilute ditch water

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D-033404

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Notes

CALTED MEETING TO
Meeting Notes

Date 2/4/97

(13)

Dave Jones
As on westside of valley w/ deep underground tiles — don't they have 3-5 yrs of storage underground?

John Dickey
- urban runoff - ag do use soil for storage + shallow groundwater for dilution - may not be applicable everywhere - feasibility is questionable

Ag person: Not new yrs of storage in soil

Idea: manufs of pesticides - do some discharges reach ag runoff from ag fields?

Approach Suggestions

(1) Prep material - How ag tile water is released?
- Introductory info

(2) Quantify water we're trying to get rid of, timing of flood flows

(3) How much flow is needed to do any good - Fred Lee

(4) Level of detail would help us focus
- Se
- Hg
- other
) all diff geos, chem, hydrologically
Have should focus on 1 constituent @ a time

(5) Timed Releases - need subcats
- reservoirs
- SM holding ponds

(6) Wetland Rest + timed Releases - how should we proceed

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D-033405

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Notes

CALFED WQTG Meeting Notes — Date 2/14/97

(19)

Future WQTG Meetings

April 1
June 3
August 6
October 1

RW – members of group are welcome to present @ future mtgs if they want

Kristina:
How will Param. Assessment team modelling link w/ DWR modelling?

RW: We need DWR, PAT & Bay-Delta Modelling to be coordinated. We need to interface with them

Steve Bell:
Stakeholders have taken the lead w/ some modeling
⇒ so CALFED & CALFED CT needs to coordinate w/ them.

Carol Howe:
Need info on what can/can't be modelled based on data avail & models avail

Fred Lee:
Make sure model beyond traditional physical/chemical models like salinity.

RW – we will.

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D-033406