# CALIFORNIA WATER AND ENVIRONMENTAL MODELING FORUM

# MINUTES OF THE STEERING COMMITTEE

Decisions	•
Action Items	<ul> <li>Put the Asilomar abstracts onto the CWEMF website after Feb. 12 – Executive Director</li> <li>Investigate whether it is possible for individuals to obtain a tax deduction from contributions to CWEMF (i.e. such as for refreshments served at workshops) TBD</li> </ul>
Parking Lot Items	• None.
Motions	<ul> <li>A motion was made and accepted for the winner of the Life Membership Award.</li> <li>A motion was made and accepted for the winner of the Career Achievement Award.</li> <li>A motion was made and accepted to not have a Hugo Fischer Award this year.</li> </ul>

# For January 14, 2010

(This meeting was held at the Solano Irrigation District Office in Vacaville.)

## REFERENCES HANDED OUT:

- 1. Executive Directors Report.
- 2. Annual Asilomar Meeting Agenda
- 3. Framework for a Peer Review of the DSM-2 Nutrient Module
- 4. Spreck's Problem Statement and Objective Statement for the workshop
- 5. Nominations for the CWEMF Awards
- 6. Finance Committee Financial Status
- 7. Notes on CWEMF Ad-Hoc Finance Committee Meeting 1/5/10

# MINUTES

1. **INTRODUCTIONS/DESIGNATION OF QUORUM** – The meeting was opened with 11 persons in attendance, and 6 proxies. A quorum was declared.

2. **EXECUTIVE DIRECTORS REPORT** – E.D. comments are worked into the narratives below.

3. **SECRETARY'S REPORT** – The minutes for the Nov. 19, 2009 meeting were approved.

4. **TREASURER'S REPORT** – There is \$45,000 total in both funds (\$26,000 in the peer review fund, and \$18,000 in the general fund). Stacy did a lot of work over the past month on the bank accounts and future budget, assisted by Paul, Marianne, and George.

#### 5. TECHNICAL WORKSHOPS -

**a. Economic and Reliability Aspects of Delta Facilities** – Spreck furnished a Problem Statement and Objective Statement to the Steering Committee of his proposed workshop. The purpose of the workshop is to contribute to the decision-making process by identifying areas of agreement and disagreement in the physical costs and water supply performance capability of alternative conveyance. Workshop attendees would have an opportunity to understand the similar and dissimilar views of experts with regard to some of the broad parameters affecting the investment of tens of billions of dollars and be in a better position to make an informed decision. A main emphasis of the workshop is to stick to the facts, and avoid political overtones. The Steering Committee members today said it would be good if the workshop could also identify data gaps, and possibly describe what economic and water supply models might be used and how. A question arose as to how this workshop relates to the BDCP's efforts.

b. **Groundwater Modeling Workshop** – To be held in Spring 2010. There are about eight tentative speakers so far. The workshop can cover any groundwater modeling topic throughout California. The Ground Water Association may be a participant.

#### 6. PEER REVIEWs –

a. **Ground Water Models** – A peer review (in the form of a comparison of the capabilities of various groundwater models) co-sponsored by CWEMF and the USBR is being planned. CWEMF is waiting for a response from the USBR to a letter that CWEMF sent to them regarding the possibility of matching funds. This will be discussed at the next Steering Committee meeting.

#### b. DSM-2 Nutrient Module -

(1). This topic was given much discussion. The Water Contractor's Joint Powers Authority (JPA) wants to have a peer review done on the modules calibration, validation, and documentation (the module's code will not be reviewed), and what the module is capable of. The review is time-sensitive, in that a result is desired by the JPA by April 2010. The question before the Steering Committee today was whether the CWEMF could assist in conducting the peer review.

(2). It appears that the JPA will be using one external peer reviewer. After much discussion it was the opinion of most present that a CWEMF peer review for a topic such as this should have at least three peer reviewers, and also that the desired JPA time line was too short for CWEMF to arrange for more peer reviewers. Comments arose as to the importance of the peer review because of the sensitivity of nutrients in the Delta to such agencies as the Sac Regional WWTP and BDCP, one issue being the concerns over the ammonia input into the Delta from regional wastewater treatment plants.

(3) Most present agreed that this was a good topic and opportunity for a peer review.

- (4). Eventually the discussion boiled down to the following three possibilities:
- CWEMF participates in the short-term peer review with one peer reviewer

- CWEMF does not participate in the short-term peer review with one peer reviewer (but may provide comments on the peer-review after it is completed)
- CWEMF could participate in a longer-term peer review in the following manner. After the single reviewer had completed his work and produced a report to the JPA contracting agency, in order for that peer review to have the stamp of approval of CWEMF it would be necessary to have two independent reviewers selected by CWEMF, not necessarily to do a separate review (in other words do the work over again independently) but rather more simply to assess the quality of the work done by the single reviewer as evidenced in the report. The task of these reviewers would be to assess whether (1) the reviewer did address fully and properly the purpose of the review, (2) conducted the review in a sound technical manner with significant justifications for every conclusion drawn and (3) followed CWEMF guidelines. This would meet the JPA's short time line and also meet CWEMF's desire for three peer reviewers.
- (5) In any of the scenarios above CWEMF could sponsor a workshop to present the findings of the peer review and comments made.

(6) Mention was made as to who the other two peer reviewers might be, if the longerterm peer review were to occur.

(7). There was some mention that perhaps this issue of peer reviewers could be discussed by subcommittee at Asilomar

(8). A final decision on CWEMF's participation was not made as 1:30 pm was approaching and people had to get back to work, but the longer-term peer review described above would be the CWEMF requirement for it to participate directly in a peer review. For this longer-term peer review to occur feedback would be needed from the JPA as to whether they agreed, two additional peer reviewers would have to be selected, and the budget for CWEMF's participation made and approved.

(9) At this point in time, CWEMF is not participating in this review and the JPA peer review will proceed on their schedule.

7. **MODEL USER GROUPS** – There have not been any model user group meetings since the last Steering Committee meeting.

#### 8. 2010 ANNUAL MEETING -

a. **General Items -** The E.D. has sent out the announcement for the annual meeting, and the announcement call for nominations for the annual awards. Announcements were also sent to ACWA, UCD, the Water Education Foundation, and others. Abstracts for the talks will be due to the E.D. by February 12. The E.D. will then put the abstracts onto the CWEMF website the following week.

b. **Officers** – Paul Hutton was proposed as convenor, Marianne Guerin as viceconvenor, Stacy Tanaka as treasurer, and George Nichol as Secretary. This is the slate that will be proposed at the annual business meeting at Asilomar.

b. **Annual Awards** – This topic was given much discussion. The following is a summary of the discussion:

(1) Life Membership Award – This award is for a person who has done much in carrying out the mission of CWEMF, rather than for modeling achievements. The winner will be given membership in CWEMF for life, and free registration at annual meetings at

Asilomar. A motion for this year's winner was made and passed, and the winner will be announced at Asilomar at the business meeting.

(2) **Career Achievement Award** – This award is for achievement in modeling and would normally be after a substantial and significant career in modeling or support of modeling activities. This award will be announced during the evening's award meeting. A motion for this year's winner was made and passed unanimously, and the winner will be announced at Asilomar at the business meeting.

(3) Hugo Fischer Award – A motion was made and passed unanimously that no one would be selected for this year. The reason was that while nominations for undoubtedly qualified people were received, many of the Steering Committee members present did not know the nominees or their contributions well enough to distinguish who the winner should be, or felt that the nominees were part of a larger team where not all members of the team were advanced for consideration. There was much discussion as to the desirability of having a single winner vs a team in the winning of the award. This was not resolved. The general feeling was that it would depend on the unique situation each year. The recommendation of the Steering Committee was that a short resume of accomplishments should be submitted for each nominee in the future, so that Steering Committee members preparing to vote will know more detail of who they are voting for and their achievements. It was mentioned that this would be in keeping with the By-Laws, which requires a 5-point resume of each nominee. Scientific achievement in modeling is the sole purpose of this award. A suggestion was made to contact parties that had nominated previous candidates to see if the candidates had made additional progress since the initial nomination.

(4) General Note on the Above Award Discussions – We need to be careful that we do not give out too many different awards so that the original Hugo Fischer Award does not appear to be watered-down. It was mentioned that we should clearly delineate the different purpose of each award as it is handed out. Also, it it was mentioned that it is not necessary to give out all awards every year.

#### 9. INCOME & EXPENSES -

a. **Executive Director Expenditures** - The E.D. has a certain amount of paid hours allocated to his needs each year, and it was agreed to set this at 250 hours/year (at \$100/hr). What the Steering Committee would like to do is give guidance to the E.D. on what it thinks the top priorities of CWEMF are for the year, and the E.D. can then spend his allotment as best fits attaining these priorities. The three top priorities are attendance at Steering Committee meetings, organizing the Annual Meeting, and assisting with website maintenance.

b. **General Membership Announcements** – The general membership will be asked to confirm some dues and workshop attendance cost increases this coming year. In order that the general membership know that they are getting the best value for their money, the Steering Committee felt that the general membership should know that a lot of volunteer time is being spent toward CWEMF activities, such as persons volunteering to put on workshops some of which take substantial time to prepare for and conduct. The general membership will also be asked if there are additional services that the CWEMF could be providing.

c. Financial Sub-Committee – It was decided that this sub-committee meet twice a year, in January and July, until it is felt that the budget is stabilized. The proposed budget was a one-year budget – next year either another annual budget or a multi-year budget will be developed and proposed. Notes from the sub-committee meeting of Jan. 5, 2010 are attached below, as well as a Financial Status Report of CWEMF finances.

## d. Voting Needed at the General Membership Meeting at Asilomar -

(1) Starting in 2011, raise individual membership dues from \$50 to \$100.

(2) Starting in 2011, have the full annual meeting cost at \$275, and the one-day cost at \$140.

e. Life Membership Fee – Should CWEMF have one? Would \$2,000 or \$5,000 be appropriate?

f. Sponsoring for Annual Meeting Social Events - Let's look for sponsors for our social events. This year one social will be partially sponsored by CH2M-Hill, and the second social partially sponsored by MWH.

g. Tax Deduction - Investigate whether it is possible to obtain a tax refund from contributions to CWEMF (e.g. for sponsorship).

#### 10. OTHER BUSINESS – None.

11. ADJOURNED – 1:30 pm. Next meeting is in March, 2010, date to be determined, at Solano Irrigation District Office in Vacaville.

		Respectfully Submitted
		George Nichol, Secretary, CWEMF
<b>ATTENDANCE</b>		
Paul Hutton	Convener	MWD
Rich Satkowski	Executive Director	CWEMF
Marianne Guerin	Vice Convener	RMA
Stacy Tanaka	Treasurer	Watercourse Engineering
George Nichol	Secretary	SWRCB
Peter Baker		Stillwater Sciences
G. Fred Lee		GFL & Assoc.
Mark Gowdy		SWRCB
Mike Deas		Watercourse Engineering
Michael Tansey		USBR
Hubert Morel_Seyton	ux	Hydroprose

On Phone: Lucinda Shih

CCWD

Proxies: Jay Lund, John Williams, Nigel Quinn, Tara Smith, Lisa Holm, Rob Tull

# NOTES ON CWEMF AD-HOC FINANCE COMMITTEE MEETING 1/5/10

Attendees: Stacy Tanaka, Marianne Guerin, George Nichol, Paul Hutton

# Background

- CWEMF expenses have exceeded income since 2006. The general fund is currently in adequate shape. However, the income/expense trend is not sustainable.
- Costs continue to increase and our revenue has not kept pace with these increases.
- Our major sources of revenue are from membership dues and annual meeting registration.
- Our major sources of expenditures have been annual meeting, ED salary, and workshops.
- These notes exclude peer review budget, as the peer review fund should not be used for general expenditures.

# Membership Dues

- Membership dues are currently \$50 per year. These dues have not increased in years. We recommend increasing dues to \$100 per year in 2011.
- No recommendation to increase organizational membership dues. CCWD expressed a reluctance to increase these dues.
- Assuming 80 dues paying members, income should increase by \$4000/yr (80x\$50).

## Annual Meeting Registration

- Fees increased this year from \$200 to \$250. We recommend increasing fees to \$275 in 2011.
- Assuming 100 attendees, income should increase by \$2500/yr (100x\$25).

# Annual Meeting Expenses

- We anticipate many opportunities to trim annual meeting costs. However, we did not believe we had adequate information to identify specific areas. We should consult with ED to identify candidate areas for cost savings and implement this year if possible.
  - Examples include:
    - Finding a second sponsor for drinks at evening events (CH@ already sponsors one evening)
    - Cutting back on some refreshments (afternoon sessions)
    - Printing the session information (packets) in black&white instead of color

#### ED Salary

• We recommend budgeting 250 hours per year for ED salary, beginning this fiscal year. We need to consult with ED to set priorities for time commitments. We identified the following priority commitments: steering committee meetings, Asilomar, and assistance with website maintenance.

# Workshop Expenses

• We differentiated between regular workshops and special training sessions.

- We recommend that regular workshops be structured to minimize costs to CWEMF. In particular, we should stop providing refreshments at the workshops. Of course, workshop organizers are free to provide refreshments on their own, and/or ask for at-time payement (e.g., \$1 for coffee). We should investigate options for tax benefits of such donations.
- We recommend budgeting \$1000/yr to cover unforeseen expenses such as rooms.
- Special training sessions should be structured such that they cover costs plus provide an
  income to CWEMF. Session organizers should be encouraged to recover costs upfront.
   CWEMF should not backstop the cost of these sessions. Expenses to consider include: food,
  room & equipment, and consultants. CWEMF should recover a per-attendee fee, say
  \$25/person. Part of this fee will defray any costs that might be incurred by ED.
- ED should consider delegating responsibilities at workshops. He does not necessarily have to attend all workshops.

Other expenses:

• Other expenses (e.g. survey monkey) should be examined and prioritized, and cut back on expenses unless absolutely necessary

Budget:

- Propose a one-year budget for this year, with scrutiny at end of FY2011 to determine scussess and failures
- After two years, we should act to put a multi-year budget in place
- Budget ommittee should meet at least annually, more in the first couple of years

#### Possible Balanced Budget Picture for 2011

Income
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Annual Meeting	\$27,500 (\$275x100)				
Membership - Regular	\$8,000 (\$100x80)				
Membership – Organizational\$11,000 (5x\$2000+\$1000)					
Total	\$46,500				

Expenses

ED Salary	\$25,000 (\$100x250)
Workshops	\$1,000
Annual Meeting	\$15,000
Other	\$5,000
Total	\$46,000

Opportunities exist to further control annual meeting expenses and "other" expenses.

# Finance Committee – Financial Status

CWEMF's fiscal year runs from July 1<sup>st</sup> through June 31<sup>st</sup>, while the membership years run the annual meeting (in late February) to the next annual meeting. The budget, as developed by the finance committee is applied to the membership year. The following report is based on the fiscal year (FY).

Note that CWEMF's financial records are available from FY2002 through 2008 (July 1, 2001 through June 30, 2009). Records have been maintained by multiple individuals with varying categorization schemes and levels of available detail.

CWEMF's revenue and expense streams are divided into the categories presented in Table 1. These categories were either developed by the budget committee and/or based on categories specified in the tax return forms. These categories have undergone change during the last seven years and as such, discussion of the exact expenditures and revenues is difficult and not advised. The only categories that can easily be tracked on expenses (total), revenue (total), and salary. Generally, the remaining sub-categories are lumped as 'Other' on the tax forms.

Table 1. Revenue and expense categories for C WERT.				
Revenue	Expense			
Annual Meeting Fees	Annual Meeting Costs			
Workshop/Training Session Fees	Workshop/Training Session Costs			
Membership Dues (Individual & Organizational)	Executive Director Salary			
Investment Interest	Administrative Costs <sup>2</sup>			
Donations	Other <sup>3</sup>			
Other <sup>1</sup>				

Table 1. Revenue and expense categories for CWEMF.

<sup>1</sup>Other revenue streams is generally used for accounting purposes when transferring funds from River City to Sterling and vice-a-versa.

<sup>2</sup>Administrative costs include printing, postage, publication, and shipping costs. This is a specific tax form category.

<sup>3</sup>Examples of other expenses are tax fees, steering committee refreshments, mileage, home internet fee, website, etc. These are the expenses that cannot be directly attributed to the annual meeting, workshops/training sessions, executive director's salary, or administrative costs.

In fiscal year (FY) 2002, CWEMF began the year with about \$48,500 in the combined River City and Sterling Bank Accounts (Table 2). For the next three years (through FY2005), CWEMF had a positive net income (average of about \$24,000). Then starting in fiscal year 2006, CWEMF began losing about \$32,000 per year. For the seven years of record, the average annual loss was about \$250.

Starting Ending Balance **Fiscal Year Revenue** Expense Change Balance Balance Change \$74,998 \$59,548 \$33,022 \$26,526 2002 \$48,471 \$26,527 2003 \$74,998 \$94,815 \$19,817 \$31,973 \$12,156 \$19,817 2004 \$94,815 \$115,818 \$21,003 \$39,615 \$18,612 \$21,003

Table 2. Starting and ending balance for FY2002 through 2008.

2005	\$115,818	\$143,706	\$27,888	\$53,108	\$25,220	\$27,888
2006	\$143,706	\$71,831	\$(71,875)	\$31,160	\$103,035	\$(71,875)
2007	\$71,831	\$66,320	\$(5,511)	\$46,683	\$52,193	\$(5,510)
2008	\$66,280	\$46,716	\$(19,564)	\$41,409	\$60,973	\$(19,564)
FY02-05 Avg	\$83,526	\$107,334	\$23,809	\$46,061	\$22,253	\$23,809
FY06-08 Avg	\$93,939	\$61,622	\$(32,317)	\$39,751	\$72,067	\$(32,316)
FY02-08 Avg	\$87,988	\$87,743	\$(245)	\$43,357	\$43,602	\$(245)

In general, the annual revenue has held constant (about \$46,000 per year). The range has been from a low of \$31,000 in FY2006 to a high or \$59,500 in FY2002. The costs have been much more variable, with a low of \$12,000 in FY2003 and a high of \$103,000 in FY2006. Overall, there is a slight decreasing revenue trend and an increasing expenses trend. This would indicate that CWEMF has not increased revenues to match increasing costs.

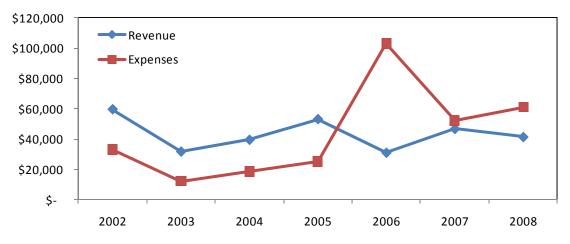


Figure 1. End of fiscal year total revenue and total expenses for FY2002 through FY2008.

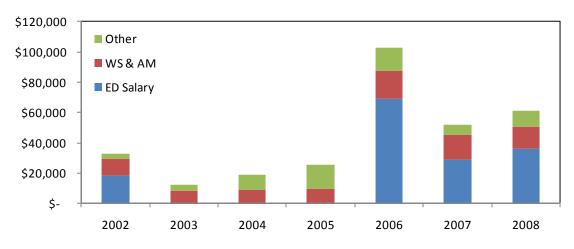


Figure 2. Expenses breakdown for FY2002 through FY2008.

CWEMF has two bank accounts (River City and Sterling). Those two accounts each contain some of the general fund and some of the peer review fund. The peer review fund is used to fund peer reviews (when they occur) and the general fund is used for all other activities. Overall, the general fund has a higher balance than the peer review fund (Figure 3). The majority of CWEMF's finances are stored in the general fund.

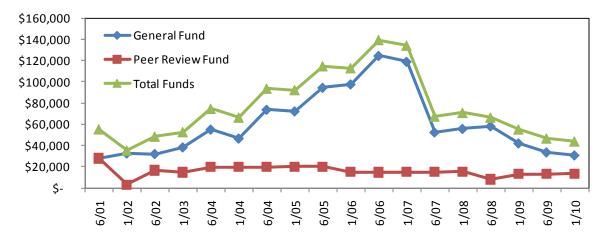


Figure 3. General fund and peer review fund balances every January 31<sup>st</sup> and June 30<sup>th</sup> for FY2002 through FY2008. January 31<sup>st</sup> is approximately the end of the membership year and Jun 30<sup>th</sup> is the end of the tax year.

Based on the previous two fiscal years (treating FY2006 as an anomalous year – highest expenses and lowest revenue), CWEMF is losing about \$12,500 per year. At the end of FY2008, there was about \$46,000 in the two bank accounts. If the general trends hold into the future, CWEMF will exhaust its reserve funds in approximately three and a half years (essentially three fiscal years).

144 - L - L - T'AL				Proposed	
Workshop Title	Status	Workshop Lead	Other Contact(s)	Date	Comments
Peripheral Canal Economics and Reliability		Spreck Rosenkrans		Before or	Current Speakers: Dave Sunding UCB, Jay Lund UCD/maybe E. Hanack PPIC, Jeff
Workshop	2	and Tom Philp	Rich Satkowski	After	Michael UOP, G. Gartrell CCWD, J. Johns DWR, perhaps others
F			Disk Ostronoli	Asoilomar	
Groundwater Modeling Process Models For Nutrient Dynamics in the	3?	Brian Heywood Paul Hutton, Marianne	Rich Satkowski		Tariq already voluteered Cover the current state of model development for nutrient dynamics. Include speakers
Delta	3	Guerin		Spring 2010	with expertise on the important processes or measurements.
Real-time WQ Management on the SJR	3	Nigel Quinn and Lisa			Nigel and Lisa will follow-up on a workshop (eventually) - there's enough here for at least one
					Workshop will review the current understanding the modeling of Delta water quality
		G. Fred Lee		1 1	pollutants transport and transformations that cause violations of water quality objectives
					and the impairment of the water quality related impairment of Delta beneficial uses.
Delta Water Quality Modeling: pollutant	3				Information will be presented on the need to develop modeling approaches and water
transport and transformations	-				quality and water quality data needs to develop water quality models for the Delta. I fee
					that it wood be better to plan on this workshop in the spring of 2010, this fall would be to
					soon since one of the key reports on Delta water quality issues will not be available till this fall
Modeling the Delta Smelt and Chinook Salmon	3	Eric Reyes			Stalled - Eric will keep track
Biological Opinions		-		-	
San Joaquin River Restoration Plan CALSIM III	?	Peter Vorster Sushil Arora	Rich Satkowski Eric Reyes	?	Presented at 2008 Asilomar - further work on hold MG follow-up with Eric
Design basis for a practical	- 3	Sushii Arora	Encikeyes		Procedures combine analytical techniques with numerical ones, allowing for accuracy
surface/groundwater model for conjunctive	3	Hubert Morel-Seytoux		November	while minimizing computational burden. In this way the system can be simulated at the
management	-			2009	realistic operational time of the day
Modeling Habitat Restoration	3	Mike Tansey	M. Guerin	2010	Phil Williams Assoc (Michelle Orr, Principal)
Data Visualization	3	Tara Smith		?	My nopes are for a workshop that would look at the effects of hydromodification (dams, low
	3	George Nichols			impact development requirements, urban runoff, debris basins) and storm water permits on the
					transport of needed sediments from the inland watersheds to the fragile coastal beaches and
Sediment Transport					wetlands. I am not quite sure how to go about this yet. I might just start out with some single
					model presentations like HEC-RAS (which now contains the HEC-6 sediment transport
					capabilities) and other sediment transport models, and then build on that
(Measurement and Data Issues)	3	Peter Vorster		2	Issues, locations, timing. Etc.
(measurement and bate issues)	- Ŭ	i elei voistei			George will ask Peterif his suggestion was for the modeling of wadeable streams (hydraulic such
					as velocity and water depth, water temperature, habitat, etc), or for such other aspects such as
					the monitoring and assessment of aquatic streams, which in a way would support future
Wadeable Streams	?	Peter Vorster	George Nichols		modeling efforts. The term "wadeable stream" is a category of waterways that has a special
wadeable Streams		Peter Vorster			significance other than just being able to wade across it. The EPA and SWRCB are doing special
					monitoring of wadeable streams for macroinvertebrates, algae, physical habitat, etc. to try to
					develop bio-criteria for them, rather than just have a narrative criteria that says "you must not
DSM2 Version 7 Training	Done	Tara Smith		Comulato	porthing to burt the biological babitat"
HydroGeoSphere	OFF	George Matangas	Lisa Holm will check	Complete	Werskehen ecourted earlier in year
Trydrobeoophere	011	oeorge watangas	Liber form win crieck		Worskshop occurred earlier in year. The soil salinity workshop idea has developed further in the last couple of weeks, and it turns o
	OFF	Marc Gowdy, Les Grober, Glen Hoffman		Fall 2009	that UC Riverside has already embarked on the same effortwe (the State Board, head up by
Dynamic Modeling of Soil Water: Salinity Build- up In California Soils					myself primarily) are in discussions with them on how to join forces. If it continues in this
	OFF				direction there would likely not be a role for CWEMF, as its already getting crowded with many
					big names. I would say remove that from the CWEMF list (which is already pretty long). I'll kee
					CWEMF in mind as we proceed with this effort.
					Ken Newman too busy for now - workshop on indefinate hold. (John Williams said that
Sampling for Fishery Models	OFF	John Williams	Rich Satkowski		CALFED is interested in the workshop, which would be 4 hours in a classroom setting
					and then 4 hours in the field.)

Status:

1 = Schedule finalized or nearly finalized

2 = Detailed development underway

3 = Concept stage

4 = External Group