



**MONTEREY COUNTY WATER RESOURCES AGENCY
BOARD OF DIRECTORS**

BOARD OF DIRECTORS:

Ken Ekelund, Chair
Claude Hoover, Vice Chair
Silvio Bernardi
Mark Gonzalez
David Hart
John Huerta
Richard Ortiz
Mike Scattini
Deidre Sullivan

STAFF:

David E. Chardavoine, General Manager
Robert Johnson, Assistant General Manager
Brent Buche, Assistant General Manager
Cathy Paladini, Finance Manager
Wini Chambliss, Clerk to the Board
Patrick McGreal, Deputy County Counsel

February 24, 2014

MINUTES

1. CALL TO ORDER/ESTABLISH QUORUM

Chair Richard Ortiz convened the Regular Board of Directors Meeting @ 12:31 PM

Directors Present: Richard Ortiz, Claude Hoover, Ken Ekelund, Mark Gonzalez, David Hart,
John Huerta, Mike Scattini and Deidre Sullivan (@12:33 PM)

Directors Absent: Silvio Bernardi

A quorum was established.

2. OPEN SESSION TO ANNOUNCE CLOSED SESSION AGENDA ITEM

3. PUBLIC COMMENTS ON CLOSED SESSION AGENDA ITEM

Members of the Oak Shores Community Association, Randy Gillenwater and Randy Feldman, spoke in opposition to the lease agreement presented by the Agency, and brought a Private Property Lease Agreement they are willing to entertain (Agency staff is in possession of the Private Property Lease Agreement to which they referred).

4. ADJOURN TO CLOSED SESSION @ 12:47 PM.

5. RECONVENE MEETING/REPORT CLOSED SESSION ACTIONS @ 1:18 PM

Deputy County Counsel Patrick McGreal reported the Board gave direction to Staff to continue

negotiations on price and terms related to the Log Boom at Oak Shores located at Lake Nacimiento.

Chair Richard Ortiz introduced the Agency's newest Board member, John Huerta, appointed by the City Selection Committee.

6. PLEDGE OF ALLEGIANCE (led by Director John Huerta).

7. PUBLIC COMMENTS

Norm Groot, Executive Director – Monterey County Farm Bureau, submitted a formal request for itemized documents related to the Regional Advisory Committee (listed within the formal letter).

Nancy Isakson, President – Salinas Valley Water Coalition (SVWC), submitted a letter regarding Water Rights Permit #11043, adding the SVWC joined the Farm Bureau in their formal request for itemized documents related to the Regional Advisory Committee (RAC). Ms. Isakson reported the SVWC will not participate in the RAC until the requested information is provided.

Steve Shimek, Otter Project/Monterey Coastkeeper, responded to comments made by the General Manager in February's Board meeting. Mr. Shimek stated that Coastkeeper issues with the Agency can be settled by agreeing upon balanced approach efforts to improve water quality in Monterey County. While trial is set in September 2014, it is his hope that settlement can be achieved before briefs are due in July 2014.

Chris Bunn, Monterey County property owner, voiced his appreciation for the Agency's assistance in maintaining the Salinas River.

Han Jantz, previous manager of the Spreckels Sugar factory, advised Agency staff of an obstruction in the Salinas River near the factory, and recommended that Tanimura & Antle also be informed of this issue.

8. CONSENT CALENDAR

- A. Approve purchase orders/contracts in excess of \$500 and credit card purchases over \$500 in December 2013/January 2014.
- B. Ratify the Monterey County Water Resources Agency Second Quarter Report for FY 2013 – 2014 for submission to the Monterey County Water Resources Agency Board of Supervisors.
- C. Approve a *Drainage and Flood Control Systems Agreement*, by and among, the Monterey County Water Resources Agency and the Pebble Beach Company; recommend the Monterey County Water Resources Agency Board of supervisors approve the Agreement; and, authorize the Chairman of the Monterey County Water Resources Agency Board of Supervisors to execute the Agreement.
- D. Approve Park Department's Renewal and Addendum No. 2 to the Management Agreement between Monterey County and Urban Park Concessionaires, dba "Monterey Lakes Recreation Company;" renew the Agreement retroactively to October 31, 2013 and extend the current term through January 31, 2015 for management of resort business operations at Monterey

County Parks lakes resort; and, authorize the Chair of the Monterey County Board of Supervisors to sign Addendum No. 2 to the Agreement.

Board Questions/Comments (*Staff responses are emboldened and italicized*):

1. If the County closes the Lake, who would be responsible for security? ***The Parks Department.***
2. The MOU between the Parks Department and the Agency should be in place prior to the expiration of the Agreement.

General Manager David Chardavoyne informed the Directors the Agency is not directly contracting with the Concessionaire; but, must sign off on it. Mr. Chardavoyne also added in the future the Agency should not sign an agreement containing potential liability without receiving some benefit.

ACTION:

Motion and Second by Directors Ken Ekelund and Mark Gonzalez to approve the Consent Calendar.

Motion carried unanimously by those members present.

9. ACTION ITEMS

- A. Consider approving the Minutes of the following meetings: Regular Board of Directors meeting held January 27, 2014 and the Strategic Planning Workshop held November 14, 2013.

Public Comment: None

ACTION:

Motion and Second by Directors David Hart and Deidre Sullivan to approve the Minutes of the Regular Board of Directors meeting held January 27, 2014 and the Strategic Planning Workshop held November 14, 2013 as corrected.

Motion carried unanimously by those members present.

-
- B. Consider approving proposed terms of a *Subdivision Improvement Agreement*, by and among, the Monterey County Water Resources Agency and Union Community Partners, related to the Bryant Canyon Channel Improvement Project, and authorize the General Manager to negotiate final terms subject to approval by County Counsel; and, recommending the Monterey County Water Resources Agency Board of Supervisors approve the Agreement and authorize the Chairman of the Monterey County Water Resources Agency Board of Supervisors to execute the Agreement.

Shaunna Juarez, Associate Water Resources Engineer, provided historical information related to Bryant Canyon improvements that were begun in 2002 but remain incomplete. Currently, Union Community Partners (UCP) is proposing to develop the Miravale Subdivision partially located within the Soledad city limits and adjacent to a partially improved channel. The channel is subject to flooding from discharged stormwater runoff. UCP has agreed to

construct unfinished improvements and enter into a Subdivision Improvement Agreement with the Agency prior to commencement of that construction. It is noted the terms of the agreement remain under development. Ms. Juarez outlined the responsibilities of the developer and the Agency that will be included in the agreement.

Board Questions/Comments (*Staff responses are emboldened and italicized*):

1. To whom will the easement belong? ***The Agency.***

Public Comments: None.

ACTION:

Motion and Second by Directors Mark Gonzalez and Mike Scattini to approve proposed terms of a *Subdivision Improvement Agreement*, by and among, the Monterey County Water Resources Agency and Union Community Partners, related to the Bryant Canyon Channel Improvement Project, and authorize the General Manager to negotiate final terms subject to approval by County Counsel; and, recommend the Monterey County Water Resources Agency Board of Supervisors approve the Agreement and authorize the Chairman of the Monterey County Water Resources Agency Board of Supervisors to execute the Agreement.

Motion carried unanimously by those members present.

-
- C. Consider approving Amendment No. 2 to the professional services agreement with Salinas Pump Company in the amount of \$54,000 to provide water well and pump maintenance, repair services and well logging services for the Castroville Seawater Intrusion Project; and, authorizing the General Manager to execute the Amendment.

Mark Foxworthy, Associate Water Resources Engineer, explained this amendment would provide funds for repair of Well 01C1 which would have been deferred to next year. Current weather conditions have made repair of this well a priority to ensure all wells are fully operational for this year's growing season.

Board Questions/Comments (*Staff responses are emboldened and italicized*):

1. Has work begun on Well 01C1? ***No.***
2. Does that also include booster bump work? ***No.***

Public Comments:

Chris Bunn, Monterey County property owner, asked whether this was one of the supplemental wells or one of the big wells that were drilled many years ago. ***It was not one of the wells the Agency drilled. However it was one of the 16 existing wells the Agency acquired for supplemental water.***

ACTION:

Motion and Second by Directors John Huerta and David Hart to approve Amendment No. 2 to the professional services agreement with Salinas Pump Company in the amount of \$54,000 to provide water well and pump maintenance, repair services and well logging services for the Castroville Seawater Intrusion Project; and, authorize the General Manager to execute the Amendment.

Motion carried unanimously.

- D. Consider adopting an Order that supports Agency participation in developing a US Bureau of Reclamation WaterSMART Program basin study for the Salinas and Carmel River Basins, and authorizes Agency Staff to perform tasks in support of this project; and, recommending that the Chair of the Monterey County Board of Supervisors sign a letter of support for the study.

Elizabeth Krafft, Senior Hydrologist, provided an overview of the US Bureau of Reclamation's WaterSMART program, stating it: focuses on improving water conservation, sustainability and helping water resource managers make sound decisions about water use; identifies adaptive measures to address climate change and its impact on future water demands; and, works with State and local partners to conduct comprehensive water supply and demand studies of river basins in the western United States.

The Agency submitted a letter of interest in January 2014 for this cost-sharing venture. Ms. Krafft discussed the four main elements of the Basin Studies:

- Projections of water supply and demand, including the risks of climate change;
- Analysis of how existing water and power infrastructure will perform in response to changing water realities;
- Development of adaptation and mitigation strategies to improve operations and infrastructure in order to supply adequate water in the future; and,
- Trade-off analysis of the strategies identified and findings/recommendations as appropriate.

The Mid-Pacific Region of the Bureau nominated the Salinas and Carmel Rivers Basin Study for FY 14 funding in February 2014. The Water Management District, Pollution Control Agency and San Luis Obispo County had already submitted letters of interest. Up to \$1 million of assistance would be made available from the Bureau with 50% local match. The four cost-sharing partners developed and submitted the proposal.

The Basin Study will provide the following opportunities:

- Improve collaboration;
- Develop solutions and strategies that will fill the gaps in supply and demand planning;
- Reduce risks to property and infrastructure associated with climate change; and,
- Improve the sustainability of the aquifers and rivers to provide adequate water supplies for the benefit of all users.

Board Questions/Comments (*Staff responses are emboldened and italicized*):

1. Can this grant be leveraged to become integral to work currently being performed? Rather than doing more work, how can this help in accomplishing what you are already doing? ***We can learn much about supply and demand types of issues and obtain data on which we can build regarding seawater intrusion, for example.***
2. If we back out, will that torpedo the entire study? ***That is unknown at this time.***
3. Can anything in this study be applied to the stream management program? ***That is our hope. One of the tasks is general in nature, referring to developing a plan of study. We may be able to apply this to the stream management program.***
4. What strings are attached to this? ***None known at this time other than the investment of staff time.***
5. Will this effort provide information related to the studies requested by the Board of Supervisors? ***Unknown at this time.***
6. Thanks to Staff for collaborating with San Luis Obispo in this effort.
7. We want to ensure the work generated by this proposal ties into existing Agency projects.
8. Do you have any idea where the cost estimates came from? ***The Bureau supplies up to \$1 million and participants determined their match that could include existing projects completed since June 2013. The Agency's 'match' will be staff time. However, the Bureau requires 600 hours of future staff time beyond the match.***
9. Will the grant proposal be posted on the website? ***Yes, we can make it available.***
10. Is the letter of support time sensitive? What is the decision deadline? ***March 3, 2014.***
11. Is there a mechanism to exit, if necessary? ***Unknown at this time.***
12. There appear to be more downsides than upsides to this proposal.
13. This is merely a letter of support and does not bind the Agency in any way.
14. The Board is being asked to approve something we just received and don't have enough information to support.
15. Is there an option to hold a study session/workshop on this matter for the public's benefit? ***No response provided.***

General Manager David Chardavoyne discussed the importance of the Agency's participation in this study to clarify issues such as the Bureau's misconception that the Carmel and Salinas Rivers were hydrologically connected.

Public Comments:

Nancy Isakson, SVWC, stated the public is unaware of the program details and possible costs to the Agency. Ms. Isakson also questioned why San Luis Obispo is interested in the Salinas and Carmel River basins. She asked that a copy of the study be made available for public review.

Christopher Bunn, Monterey County resident, agreed with comments made by Ms. Isakson and stated there is no need to make hasty decisions since too many questions remain unanswered.

Bob Perkins, Monterey County resident, questioned if anyone can quantify climate change. He added his belief the Bureau will prepare a report the Agency supports to its determined end...one

that drives their regulations. Mr. Perkins urged postponing a decision to receive in depth information about possible consequences.

Bob Martin, King City resident, asked that the decision to support be postponed until it is vetted.

General Manager Chardavoyne added that none of the partners asked the Agency to become involved. We found out they were involved contacted the US Bureau of Reclamation to learn more about the study. It is Staff's contention the study will proceed if we do not participate; and in that event, we will have no input.

ACTION:

Motion and Second by Directors Ken Ekelund and Mark Gonzalez to adopt an Order that supports Agency participation in developing a US Bureau of Reclamation WaterSMART Program basin study for the Salinas and Carmel River Basins, and authorizes Agency Staff to perform tasks in support of this project, *subject to inclusion of a withdrawal mechanism*; and, recommend that the Chair of the Monterey County Board of Supervisors sign a letter of support for the study.

Vote

Ayes: Directors Richard Ortiz, Claude Hoover, Ken Ekelund, Mark Gonzalez, John Huerta, David Hart, and Deidre Sullivan

Nays: Director Mike Scattini

Absent: Director Silvio Bernardi

Motion was carried.

Prior to discussion of Action Item E, Director Mike Scattini recused himself due to ownership of properties located around the Salinas River included in some of the projects.

E. Consider receiving an update on the Short-Term Salinas River Stream Maintenance Program; and, providing direction on how to proceed with the Program's Environmental Impact Report.

Shaunna Juarez, Associate Water Resources Engineer, reviewed prior actions and a project matrix that included summaries and comparison information on the following proposals:

- The long-term Salinas River Management Program;
- Stream Maintenance Program (proposed in the EIR);
- Salinas River Task Force's Short Term Project;
- The Nature Conservancy's Demonstration Project;
- Resource Conservation District's Invasive Species Removal; and,
- The General Farm Investment's Project Proposal.

The matrix provided information on each proposal based on the following categories: approach, activities, area (footprint), site selection criteria, timeline, roles and responsibilities, permits required, environmental impacts, proposed mitigation strategy; and additional CEQA requirements.

Staff stated an agreeable approach to selecting a viable project should include: a cooperative effort, developing existing conditions, engaging permitting Agencies early

on; determining work and avoidance areas with the goal of flood risk reduction dictating proposed work; a phased approach for system-wide benefit; and, monitoring project benefits.

The phased approach: will allow initiation of work sooner; provide additional resources from other organizations; offer a variety of activities; and, increase clarity and understanding of the program. The next step in the process will be updating the project for revised CEQA analysis.

Board Questions/Comments (*Staff responses are emboldened and italicized*):

1. Do you have any idea how many individual land owners and river miles the map incorporates? ***Not at this time.***
2. What is the option for individual landowners if you are not in the priority area? ***There are other activities that are not listed herein for which individual landowners may be eligible.***
3. The matrix has been extremely helpful in fostering discussion by distinguishing the differences/similarities in projects.
4. A question was posed to community members present at the meeting to provide input regarding whether they believed it feasible to do minor revisions on the EIR Project Description.
5. If I am an anxious property owner and I want to apply for a permit, what is the process? ***Assuming the property owner is operating under the Agency's permit, this proposal will identify property owners immediately, followed by the screening of the sites. We would then determine how many property owners want to move forward and secure the site-specific data necessary to compile a 404 Application.***
6. Will minor modifications to the permit delay certification of the EIR? ***There are set criteria in CEQA regarding modifications that would initiate the circulation of a new EIR. If there is substantial evidence of different environmental impacts that were not covered in the process, the EIR would be reopened.***

Public Comments:

Jennifer Biringer, The Nature Conservancy (TNC), found the process very helpful, and suggested an additional stakeholder meeting would be helpful to form the basis of a solid short-term program. It is important to expedite the process to allow growers to get into the river this year, and then concentrate greater efforts toward the long-term program.

Norm Groot, Monterey County Farm Bureau, discussed the Salinas River Task Force's proposal for a short-term maintenance program which he believes has merit, having been collaboratively developed. He described activities that individual landowners could perform under the proposal. Mr. Groot indicated this short-term proposal is an interim step toward a long-term management plan. Landowners should be treated equally and afforded an opportunity to participate in a short-term channel maintenance project as soon as possible.

Steve Shimek, Monterey Coastkeeper/Otter Project, thanked the Board of Directors for slowing down this process, the result of which has been diminished opposition to the short-term project by NOAA Fisheries and the Regional Water Control Board. Mr. Shimek is of the

opinion that process and project are being confused in discussions, but process is of the utmost importance. He also stated the process in the EIR should be modified because it engenders opposition.

Abby Taylor-Silva, Grower-Shipper Association of Central California, discussed the Task Force's general agreement with criteria outlined in TNC's Demonstration Project, which have been incorporated into the Task Force's proposal. Ms. Taylor-Silva then outlined the Task Force's proposal, and stated they have conducted substantial outreach to growers, operators and landowners in the hopes of finding a solution that manages the River for multiple benefits including flood risk, water recharge and water quality improvement with an immediate focus on deferred channel maintenance, invasive species control and trash removal.

Nancy Isakson, SVWC, agrees with the hybrid program developed by Agency staff. She stated the stakeholder meetings were very beneficial, adding that minor modifications may be necessary for the EIR. She stated it appears moving forward is possible without recirculating the EIR. Ms. Isakson agreed with convening an additional stakeholder meeting.

Darlene Din, Salinas River Channel Coalition, stated significant progress has been made, especially with respect to process. Ms. Din also supported the request for an additional stakeholder meeting, and added the next hurdle to overcome will be that of securing permits.

Christopher Bunn, General Farm Investments, clarified the area(s) of the Salinas River under consideration – the constrained reach. Mr. Bunn requested clarification as to why the General Farm project is not included in the 404 permit since there are two different sections of the river that require different approaches. Moving forward should include both of those sections. He stated the playing field should be level. Ms. Juarez responded to Mr. Bunn's question, stating the amount of work to be developed to determine activities appropriate for that project would be included in the "Beginning permitting on larger scale" section. The 404 Permit application for Chualar-Gonzales would not be appropriate for this constrained reach. Staff must develop those activities and include them into a 404 Permit application.

David Costa, Monterey resident, stated not every project involves a bulldozer. He stated more money is spent on engineering, permitting, and studies than actual work performed in the channel. Mr. Costa stated the arundo is taking over the river, and that should be a concern for everyone in the County.

Board Questions/Comments (*Staff responses are emboldened and italicized*):

1. Directors commended Staff and the community their collaboration working through these issues. There should be another stakeholder meeting since we are heading in the right direction.
2. Even though stretches of the River and projects are different, the process involved is not very different. Stakeholders are now tasked with looking at the EIR and coming up with a revised description that actually has a process. An additional stakeholder meeting wherein the process and possible revisions to the description are discussed could result in forward motion toward EIR certification.

ACTION:

Motion and Second by Directors Deidre Sullivan and David Hart to receive an update on the Short-Term Salinas River Stream Maintenance Program; and, establish an additional stakeholder meeting prior to the March 2014 Board of Directors meeting to refine the process for possible modifications to the Project Description in the Environmental Impact Report.

Motion carried unanimously by those members present (Director Mike Scattini recused; Director Silvio Bernardi absent).

Director Mike Scattini returned to the dais at 3:38 PM

- F. Consider authorizing the General Manager to proceed to execute all agreements necessary to complete environmental documents, permit applications and supporting materials related to the Salinas River Stream Maintenance Program in the amount not to exceed \$150,000 in the aggregate, subject to approval as to form by County Counsel.

Shaunna Juarez, Associate Water Resources Engineer, provided background on the Salinas River Stream Maintenance Program. At present, the Agency needs a new five-year 404 permit. Necessary steps include: CEQA analysis of the project; Board of Supervisors approval of the Project; Biological Assessment and NEPA analysis; submission of 404 permit application including Jurisdictional Delineation; formal consultations with NOAA Fisheries and US Fish and Wildlife Service; and, Water Quality 401 Certification from the Regional Water Quality Control Board.

At this time, Agency Staff have developed a Final EIR in accordance with CEQA. However, certification of the EIR was delayed while staff continued working with stakeholders regarding possible project and EIR revisions. The 404 Application has not yet been prepared although it has been budgeted this fiscal year.

With regard to the EIR, the contract with CardnoENTRIX expires March 31, 2014, and only a limited amount of funding remains. The Board has directed Staff to move forward; but, at this time costs are estimated at \$25,000 to \$100,000. The range of activities includes revising the project description with no substantive changes to recirculating the Draft EIR. The quantity and type of future comment letters is also unknown at this time.

In summary, Staff anticipated CEQA would be complete by last summer; \$150,000 has been budgeted in this fiscal year for permitting and related documents, and additional CEQA work can be paid out of that amount. The next phase (permitting) can be started while CEQA revisions are underway. This process will help expedite the steps necessary to move the program forward.

Director Ken Ekelund left the dais at 3:42 PM and returned at 3:45 PM.

Board Questions/Comments (*Staff responses are emboldened and italicized*):

1. Who pays the total cost for EIR? ***The Agency is responsible for paying the cost. The total amount expended thus far is \$611,000 from the various Benefit Assessment Zones.***

2. How long will the \$150,000 last? *This fiscal year – if we move quickly. We do not have cost estimates yet.*

Public Comments:

Darlene Din, Salinas River Channel Coalition, stated the Coalition will work diligently with Agency staff in an effort to get into the river this year. She voiced appreciation to staff for sharing this information before it is actually in final form, which is outside of the normal procedure, in the effort to expedite the process.

Abby Taylor-Silva, Grower-Shipper Association, supports this request for \$150,000 to expedite the process.

Christopher Bunn, Monterey County landowner, asked whether the 404 permit was for The Nature Conservancy's Demonstration Project or subsequent grower projects that will come afterwards. *It is for the broader 404 permit that would cover all the proposed projects on the River that were discussed.*

ACTION:

Motion and Second by Directors David Hart and John Huerta to authorize the General Manager to proceed to execute all agreements necessary to complete environmental documents, permit applications and supporting materials related to the Salinas River Stream Maintenance Program in the amount not to exceed \$150,000 in the aggregate, subject to approval as to form by County Counsel

Motion carried unanimously by those members present.

-
- G. Consider providing direction to Staff on whether to attempt Salinas River Diversion Facility operation for the period April 1 through October 31, 2014.

Howard Franklin, Senior Hydrologist, reviewed prior actions, including the Reservoir Operation Committee's recommendation on February 6, 2014 that releases be made to support the operation of the Salinas River Diversion Facility (SRDF) if river channel conditions exist which would allow for a reasonable possibility of two to four weeks of operation.

Mr. Franklin reported this is in the third consecutive dry winter on the Central Coast. Last summer, emergency operations to repair the Hydro facility at Nacimiento resulted in an imbalance in storage between the two reservoirs. The Nacimiento Conservation pool usable storage is at approximately 57,000 acre-feet; San Antonio is 7,260 acre-feet *below* minimum pool (conservation pool). San Antonio is *not available* for conservation releases in support of the SRDF.

Mr. Franklin stated that based on Pacific HydroMet's four-month outlook, the following strategies may be applied for operating the SRDF in 2014:

- Limited to no possibility of delivering water to the SRDF under these dry channel conditions
- Possible April SRDF start-up:
 - Assume channel conditions similar to 2013 – would need flow out of Arroyo Seco

- Begin releases on or about March 1, 2014;
 - Maximum release capacity of 400 cfs on March 1st
 - Maximum release capacity of 350 cfs on April 1 (after operating Naci 30 days)
 - Operational period of two to four weeks (best case)
- No reasonable expectation under any of these scenarios for SRDF start-up after May 1st

Board Questions/Comments (*Staff responses are emboldened and italicized*):

1. Is it correct there is no flow right now between Chualar and Spreckels? ***That is correct.***
2. If we cannot provide water from the diversion facility, would we just go to minimum flow? Is there any benefit to any large releases? ***Yes...there are groundwater recharge benefits to releases.***
3. The benefits of releases include the generation of income related to hydroelectric power, groundwater recharge; operation of the SRDF, if there is enough water; and, satisfying the Biological Opinion for fish.
4. At the Reservoir Operations Committee, it was determined an effort should be made to operate the SRDF.
5. Can we meet our irrigation demands for the Castroville area by bringing supplemental wells online along with the usage of industrial pond water? ***None of the supplemental wells are yet on line but we have initiated that process. The industrial pond water equates to two additional wells being online.***

Mr. Franklin reported one option is not to operate the SRDF, reducing releases to minimum environmental requirements. This would result in evaporative losses (approximately 20-60% less than the losses incurred pushing water down the channel). Once we are in minimum pool, the policy is to curtail releases from that reservoir. Another option is to wait and see what might develop with the weather.

Public Comments:

Dale Huss, Sea Mist Farms and Water Quality and Operations Committee Chair, stated he does not expect the SRDF to be operational this year unless there is a major rainstorm. Because of the loss to the vegetation, it is preferable that the water remain in the reservoir. Currently, the growers are paying \$50 - \$60 per acre-foot for SRDF operations and maintenance. If the SRDF is not operational, what happens to that money? Why should growers have to pay this money if no water is being delivered? With communication and working together we will get through this year. Use of industrial pond water sounds good; but, the cost is unknown. Growers must be included in discussions related to use of pond water. Mr. Huss indicated his plans to attend the Monterey Regional Water Pollution Control Agency's meeting to speak to this issue.

Nancy Isakson, SVWC, said this highlights the need for a Drought Contingency Plan. Ms. Isakson voiced her hope all of these issues are being documented for the creation of a policy and operational guidelines. She stated she has asked for a Drought Contingency Plan since the Salinas Valley Water Project went into operation. Regarding costs, the growers agree to pay a certain amount per acre specified acre-feet of water delivered. This is the Agency's obligation to the growers.

Board Questions/Comments (*Staff responses are emboldened and italicized*):

1. With all supplemental wells running, there is a danger of accelerating the seawater intrusion front. When will we see the next seawater intrusion maps? ***Maps are currently being developed and should be available sometime this summer. We are continuing to see decline in all subareas when we should be seeing recovery.***
2. It will take a couple of years to know how badly seawater intrusion has been exacerbated.
3. The most important thing we can do in this valley is not aggravate seawater intrusion.
4. If releases are made to run the pumps here, in two weeks how much water would be diminished? ***Most of the water will be used to establish flow to the SRDF (approximately 23,000 – 30,000 acre-feet).***
5. How do we deal with the issue of water not being delivered to those who are paying? ***Cannot provide a complete answer at this time. However, electrical power will remain “on” at the SRDF for the heaters and the motors. The greatest cost is the electricity, and the CSIP wells will run longer, and I believe the money will just transfer. We must investigate this further. It is a good question. We do not just mothball the SRDF and walk away...it must be maintained, but maybe not daily.***

Staff has provided two options; but, they are not comprehensive. Another option is to direct staff to operate the SRDF if there is a probability of making flows to the SRDF.

Additional Board Questions/Comments (*Staff responses are emboldened and italicized*):

1. How much rain is predicted? ***One to two inches in the valley floor translating to five inches of rainfall in the upper watersheds. This would really drive the system.***
2. We should leave this decision up to the staff until the next Reservoir Operations Committee.
3. What is the cost associated with running the Rubber Dam for two weeks? It seems to be throwing good money after bad.
4. If no water is coming down the river, we might be able to get default maintenance.
5. At the Reservoir Operations Committee, we discussed the possibility of not making the Spreckels gauge. If that is the case the water should remain in the reservoir.
6. Is this a period that we can study better to understand the subsurface flows? ***We do not have anything planned at this time.***
7. With no releases, there are no fish to count, and we save \$500,000.

ACTION:

Motion and Second by Directors Ken Ekelund and Claude Hoover to curtail releases beyond minimum flow to the Salinas River Diversion Facility, subject to review by the Reservoir Operations Committee.

Motion carried unanimously by those members present.

10. KEY INFORMATION AND CALENDAR OF EVENTS – Meetings will be held according to the regular schedule, with the addition of the Budget Workshop from 9:00 AM to Noon prior to the regular Board meeting @ 1:00 PM on March 24, 2014.

11. GENERAL MANAGER'S REPORT –

General Manager David Chardavoyne reported on the following:

- a) Personnel - Introduced two new employees: Fabricio Chombo, Account Clerk II; and, Mark Foxworthy – Associate Water Resources Engineer.
- b) Long-Term Stream Management Program and Water Right Permit #11043 remain as unfunded projects.
- c) Tour of Nacimiento Dam: the Leadership Committee LLC is interested in a possible interlake tunnel and water supply at the Jerritt site, and sponsored a tour.
- d) Monterey County Strategic Initiatives Workshop (held in December 2013): Now part of an infrastructure water initiative that also includes the County groundwater study related to General Plan. No work will be performed on the General Plan activity until a reimbursement agreement is in place with Monterey County.
- e) Coastkeeper Litigation: Mediation has been ordered by the Judge; and, progress is being made but cannot be discussed. Meetings have been held with the Castroville Community Service District, Marina Coast Water District, and the City of Salinas to discuss possible solutions...at no cost to the Agency.
- f) Brown Act Litigation: Provided 4.5-hour deposition in this case brought against Monterey County by Attorney Richard Rosenthal.

Question: Is Coastkeeper aware of the plans being made? *Yes, they are completely aware and we have had meetings with them as well as the Pollution Control Agency.* Deputy County Counsel warned this discussion was leading into active litigation and should be held in Closed Session.

12. COMMITTEE REPORTS – Directors had no comments regarding Standing Committee meetings.

13. INFORMATION ITEMS – Directors had no questions or comments on Information items.

14. CORRESPONDENCE – Directors had no questions or comments on Correspondence items.

15. BOARD OF DIRECTORS' COMMENTS – New Director John Huerta expressed his appreciation for the deep level of consideration employed by the Board in making difficult decisions.

16. ADJOURNMENT - Chair Richard Ortiz adjourned the meeting @ 4:56 PM.

SUBMITTED BY: Wini Chambliss
APPROVED ON: March 31, 2014

Wini Chambliss, Clerk to the Board



February 24, 2014

Mr. Richard Ortiz
Chair, Board of Directors
Monterey County Water Resources Agency
893 Blanco Circle
Salinas, CA 93901

RE: Regional Advisory Committee

Dear Mr. Ortiz & Directors:

Monterey County Farm Bureau has been a participant in the Regional Advisory Committee ('RAC') that is seeking to identify a project proposal to fulfill the requirements of the State Water Resources Control Board settlement document from 2013 ('SWRCB Settlement') for Water Permit #11043 ('Permit'). We have attended RAC meetings from the beginning, where we adopted the following Purpose Statement early in the process:

The Monterey County Water Resources Agency Regional Advisory Committee's purpose is to:

- *Oppose the revocation of Water Rights Permit #11043*
- *Identify the water in this permit as essential to the long-term vitality and sustainability of Monterey County; and*
- *Agree to work in good faith to develop projects that utilize these water resources to achieve the highest and best use while promoting sustainability*
- *Update and retain Water Rights Permit #11043, and,*
- *Determine feasibility of utilizing water pursuant to this permit within the context of the original permit; and,*
- *Identify the water available pursuant to Permit #11043 and work together to identify feasible project that put those water resources to beneficial use.*

During the course of our meetings, we were informed that there is no master map of this water permit, either when originally issued or modified; after a search at the State Water Resource Control Board ('SWRCB') offices, no map has turned up detailing the area of use for this permit. This has placed a cloud of uncertainty over the exact area of use and led to scope creep from our original Purpose Statement.

Our Board of Directors expresses concern about this process as it attempts to now identify a recommended project within the scope of the Permit.

As currently understood, the RAC is to identify a possible project that fits within the current Permit provisions, make a recommendation to the MCWRA Board of Directors, which will then direct Downey Brand (and their consultants) to prepare a Notice of Preparation of this proposed project for submission to the SWRCB.

In our view, the RAC process is wandering off track and will not make the SWRCB Settlement milestone (deadline) as currently set for this coming July.



During the course of the RAC meetings there have been repeated requests for information and documents that would allow us to better focus, as a committee, on our task. Discussions continue on possible projects that are far afield of the Permit designations for points of diversion, as well as possible uses for this water. Finally, there is a sense of frustration amongst RAC participants that other efforts are continuing without our involvement or knowledge, similar to the settlement action that came as a surprise to the RAC members last summer.

Recent documents obtained from a Monterey County Board of Supervisors closed session meeting indicate that more activity is going on behind the scenes and that the RAC is becoming a public grandstand for actions being taken without involving the RAC members. Increasingly there is uneasiness that each RAC meeting is to demonstrate that a public process is taking place as a means to satisfy a transparency requirement.

At the MCWRA Board Meeting on January 27, 2014, an action item was approved for additional funding to Downey Brand for efforts on this Permit. We express concern that this was not adequately delineated other than a contingency expenditure, when in fact there may be continuing work on this Permit without involvement of the RAC.

Monterey County Farm Bureau does not seek, nor will participate in, a process that merely rubber-stamps any other project proposals that may come from other discussions on what will ultimately be proposed for the Permit water use.

Our Board of Directors is requesting that specific information be provided to all members of the RAC to allow this process to become more meaningful and focus the discussion back on the intent of the Purpose Statement:

- Compilation and issuance of minutes for all meetings of the RAC since its inception; RAC members should be allowed to review minutes of prior meetings in advance of their next meeting; approval of prior meeting minutes should be done at the beginning of each RAC meeting, as takes place in other public meeting processes.
- A legal determination obtained and published to the RAC members on the issue of surface water storage facilities within the Permit as amended by the SWRCB Settlement and if a specific modification is required to the Permit should storage become part of a recommended project; RAC members have requested this on numerous occasions and no formal effort by MCWRA has been made to obtain this information to date. With water now only available in this Permit during winter flow months, it is impertitive for the committee to understand if surface water storage of this water is implied within the amended Permit provisions, or if a specific Permit modification is needed to include this element of any recommended project.
- Provide information to the amount of water currently utilized by projects under this Permit; RAC members have not received any report or calculation of how much water is currently utilized under the Permit, and ultimately, what is available for diversion under the Permit; we only have the number from the SWRCB Settlement document that reduced the water right considerably. Numerous requests for this information have gone unanswered to date.



- Discussions at RAC meetings should be focused only on possible projects that fit within the confines of the current Purpose Statement; too much time is being wasted on discussion of projects that are clearly beyond the Permit diversion points and areas of use. RAC members should either focus on the intent of the Purpose Statement as originally agreed upon or undertake a process where the Purpose Statement is modified to broaden the scope of these discussions. We do not recommend that the Purpose Statement should be modified and discussions at RAC meetings should be focused on the original intent of RAC Purpose Statement parameters.

Without substantive progress on the items listed above, our fear is that the RAC will continue to wander without focus or intent, and in the long run, not be able to make any deadlines as set forth in the SWRCB Settlement. We remind MCWRA staff and RAC members that the SWRCB Settlement is not finalized or certified, causing an element of uncertainty if any modification were to be undertaken at this late date. The prospect of the SWRCB Settlement becoming a very public process will draw unnecessary attention from those who wish to steal water from the Permit for uses in areas outside the Salinas Valley basin.

We urge your cooperation in producing the requested information, and helping to refocus the RAC meetings into meaningful discussions working towards the goal of identifying and recommending a project to the MCWRA Board of Directors, within the time frame allowed. As it currently operates, the RAC will not be close to making any recommendation within the first milemarker as set forth by the SWRCB Settlement.

Your earliest response is appreciated.

Sincerely,



Norman C. Groot
Executive Director

Salinas Valley Water Coalition

P.O. Drawer 2670 • Greenfield, CA 93927
(831) 674-3783 • FAX (831) 674-3835



HAND DELIVERED

Monterey County Water Resources Agency
Board of Directors
893 Blanco Circle
Salinas, Ca 93901

24 February, 2014

Dear Chair Ortiz and Directors;

The Salinas Valley Water Coalition (SVWC) and its members have actively supported Monterey County Water Resources Agency (Agency) and the development of water projects within the Salinas Valley. We have supported two reservoirs, the Castroville Seawater Intrusion Project, the Salinas Valley Reclamation Project and the Salinas Valley Water Project to sustain our basin's water resources, to address the seawater intrusion problem and provide flood protection. We have worked with our neighbors and other organizations to resolve our differences so these projects could be successfully financed and implemented.

The SVWC has been a participant in the Regional Advisory Committee (RAC). The RAC was formed by MCWRA to oppose the revocation of Permit #11043 and to develop a strategy as to how the water can be put to best beneficial use. To this end (and goal), the SVWC joined other community members on the RAC and developed the Purpose Statement, which includes, in part, the following:

"The Monterey County Water Resources Agency Regional Advisory Committee's purpose is to:

- ***Update and retain Water Rights Permit #11043; and,***
- ***Determine feasibility of utilizing water pursuant to this permit within the context of the original permit; and,***
- ***Identify the water available pursuant to Permit #11043 and work together to identify feasible projects that put those water resources to beneficial use. "***

This purpose statement was developed and adopted at the RAC's April 16, 2013 meeting. Since that time, but more particularly, since the approval of the 'Settlement Agreement' between the SWRCB and MCWRA in July, 2013, the RAC has spent much of its meeting time discussing (and cussing) the definition of 'context', how the water

1

Mission Statement: The water resources of the Salinas River Basin should be managed properly in a manner that promotes fairness and equity to all landowners within the basin. The management of these resources should have a scientific basis, comply with all laws and regulations, and promote the accountability of the governing agencies.

Salinas Valley Water Coalition



P.O. Drawer 2670 • Greenfield, CA 93927
(831) 674-3783 • FAX (831) 674-3835

right pursuant to #11043 could be used for other projects that many of us believe do not fit within the 'context of the original permit'; only to have the meetings be very unproductive.

The Salinas Valley Water Coalition joins the Monterey County Farm Bureau (MCFB) in their request to your Board today, including:

- Requesting that the discussions at RAC meetings be focused only on possible projects that fit within the context of the committee's Purpose Statement, and projects be identified that meet this goal.

We also request that you obtain a legal determination as to what modifications to the existing place of use and point of diversion identified on permit #11043, constitutes a 'change' to the existing permit and what modifications would require a new application be submitted? What is the process of each, including the approximate length of time to complete any changes? The legal determination and process information must be shared with the RAC.

There has been, and continues to be, much discussion as to where and how the water available pursuant to Water Right Permit #11043, can be utilized and by whom; and yet, each time this question has been raised at the RAC, your staff has failed to provide any answers. It is unfair to ask the RAC and the public to work in a vacuum without being fully informed. The Settlement between the SWRCB and MCWRA regarding the MCWRA retaining Water Permit #11043, and the conditions and terms under which the SWRCB agreed not to continue to seek revocation, were further limiting and confining – and yet, at each RAC meeting, different members discuss the need to include an element of storage for any project developed for this permit. However, we do not know if the inclusion of storage would require a change in the existing permit or would a new application be required?

Your staff has informed us that approximately an additional 58,000 acre feet of water is needed each year to stop seawater intrusion. We think there has been much misinformation provided regarding Permit #11043, the water that is/could be available utilizing this water right, and the manner in which it could be used.

We want to work with the Agency to insuring we solve our water problems, stop seawater intrusion and provide an adequate flood protection program. If the Salinas Valley truly needs an additional 58,000 acre feet of water each year to stop seawater

2

Mission Statement: The water resources of the Salinas River Basin should be managed properly in a manner that promotes fairness and equity to all landowners within the basin. The management of these resources should have a scientific basis, comply with all laws and regulations, and promote the accountability of the governing agencies.

Salinas Valley Water Coalition

P.O. Drawer 2670 • Greenfield, CA 93927
(831) 674-3783 • FAX (831) 674-3835



intrusion, then we need to move forward as quickly as possible to identify which projects are available, and how to best use of the water available with Permit #11043 to solve these problems. However, we can only do so by being fully informed and by participating in the manner that has been agreed to by all participants. The SVWC will not participate in the RAC meetings unless and until the information requested herein and by the MCFB is provided.

Thank you for your consideration of our request,

A handwritten signature in cursive script, appearing to read "Nancy Isakson".

Nancy Isakson, President
Salinas Valley Water Coalition

Mission Statement: The water resources of the Salinas River Basin should be managed properly in a manner that promotes fairness and equity to all landowners within the basin. The management of these resources should have a scientific basis, comply with all laws and regulations, and promote the accountability of the governing agencies.

APOCALYPSE CANCELLED

THE GLOBAL WARMING DEBATE

Scientists argue that the "hockey stick" graph used by the UN to demonstrate recent trends in global warming is based on a false algorithm, and leads to wrong conclusions being drawn.

by **Christopher Monckton**
(The Viscount Monckton
of Brenchley)
© 5 November 2006

Email: monckton@mail.com

In the *Sunday Telegraph* articles for 5 and 12 November 2006, I have done my best to steer between the strongly held opinions and propaganda statements of climate change true-believers and contrarians alike. Climate change is an inescapably political issue. I have spent several months reading the leading scientific papers and assessing the arguments put forward, often with passionate conviction, by the protagonists on both sides.

The official case depends crucially on a series of assumptions whose truth has not been demonstrated, some of which are not easily testable. In particular, the temperature effect at the surface of the incompletely saturated peripheral absorption bands of CO₂ at the tropopause cannot be confidently estimated. Air and sea temperatures have failed to rise anything like as much as "global warming" theory predicts. Explanations for the shortfall of observed out-turn against theoretical projection are mutually inconsistent and scientifically dubious. I conclude that, on the balance of probabilities, the contrarians are significantly closer to the truth than the United Nations (UN) and its supporters.

— Monckton of Brenchley

Is there a scientific consensus about global warming?

All climate scientists accept that there are more greenhouse gases in the air than there were, and that in consequence the world will warm somewhat. There is no consensus on the central question of how much warming there will be. The main area of dispute is about the magnitude of the temperature effect of carbon dioxide. Arrhenius (1896) was the first to calculate the effect of doubling atmospheric carbon dioxide, concluding that global temperature would rise by 8° C.

In the 1970s, experiments showed that at the Earth's surface the principal absorption bands of atmospheric CO₂ were saturated, and it was thought that a doubling of CO₂ might raise temperature by as little as 0.5° C. However, subsequent experiments indicated that in the much thinner air and much lower temperature at the tropopause—the top of the main atmospheric layer, around 5–11 miles up—the secondary absorption bands of CO₂ were not fully saturated. Some of the outgoing, long-wave radiation from the Earth's surface would be intercepted at the tropopause and scattered back into the troposphere. The UN's 1990 and 1996 Assessment Reports suggested that additional warming of 4.4 watts per square metre per second would occur. The 2001 report cut this figure to 3.7 watts. However, it is not clear how much of this additional energy reaches the surface. A submission to the UN by Dr Hugh Ellsaesser suggested that only 1.5 watts would reach the surface. See also De Laat et al. (2004) and Etheridge et al. (1996) for a discussion of man's contribution to the greenhouse effect. Leading climate scientists who strongly disagree with the view that additional carbon dioxide in the air will have the large effect on the climate suggested by the UN include Professor Richard Lindzen of the Massachusetts Institute of Technology, who recently received a £10,000 prize for courage in opposing conventional thinking. Some 41 scientists recently wrote to the *Telegraph* to say they were not part of, and were not convinced by, the "global warming" consensus.

Contrarians and the fossil fuel lobby: The Royal Society, in a current pamphlet entitled "A guide to facts and fictions about climate change", says: "There are some individuals and organisations, some of which are funded by the US oil industry, that seek to undermine the science of climate change and the work of the [UN] Intergovernmental Panel on Climate Change."

Environmentalists say that Exxon Mobil, in particular, has provided funding to organisations that disagree with the "consensus" view on climate change. See, for example, <http://www.exxonsecrets.org>.

On the other hand, the Royal Society is subsidised by the UK government, and most scientists worldwide are State-funded. It has been said that the fundamental equation of State-subsidised science is "No Problem Equals No Funding". The *Sunday Telegraph* article intentionally avoids point-scoring of this kind, on either side of the debate, and is directed not *ad hominem* but *ad rem*. As for UK funding of the UN's technical panel on climate change, the UN's documents occasionally acknowledge the British government's funding.

Did rising carbon dioxide end the ice ages?

The double graph, reproduced below, lists CO₂ concentration above temperature; but, if the two graphs were superimposed at sufficient scale, as is customary when comparing such similar curves, changes in temperature would be seen to precede changes in CO₂ concentration by 400 to 4,000 years. Petit et al. (1999) state that during each of the last four interglacial periods, the Earth was warmer than the current warm period.

Was there a mediaeval warm period?

Were mediaeval temperatures at least as high as today's? This question is central to answering the question of whether "global warming" is or will become dangerous to the planet.

Until the UN's 2001 report, the existence of a warm period of about 500 years between c. AD 950 and c. 1450 had not been controversial. The mediaeval warm period formed part of a natural cycle of climatic variations that had been apparent since the end of the last ice age ~12,000 years ago.

According to Villalba (1990, 1994), as well as Soon and Baliunas (2003), the mediaeval warm period was warmer than the current warm period by up to 3° C. From c. 1000, ships were recorded as having sailed in parts of the Arctic where there is a

permanent ice-pack now (Thompson et al. 2000; Briffa 2000; Lamb 1972a, b; Villalba 1990, 1994).

In 1421, a Chinese Imperial Navy squadron sailed right round the Arctic and found no ice anywhere. It is possible that at that time there was less of an icecap at the North Pole than there is now, particularly in summer. Yet the polar bears survived. Though there has been much discussion of the supposed threat posed by the warmer Arctic, the polar bears are thriving in the current warm period. Eleven of the 13 principal known families are prospering as never before.

Greenland in the Middle Ages: Erik the Red had named Greenland "Greenland" to encourage Danish settlers, because in his time south-western Greenland was indeed green. It was ice free, and was extensively cultivated until c. 1425, when the farms were suddenly overrun by permafrost.

The Viking agricultural settlements remain under permafrost to this day—a powerful indication that the Middle Ages were warmer than the present, and that there is little cause for alarm at the current melting of Greenland glaciers because they are very likely to have melted to more than their present extent during the mediaeval warm period.

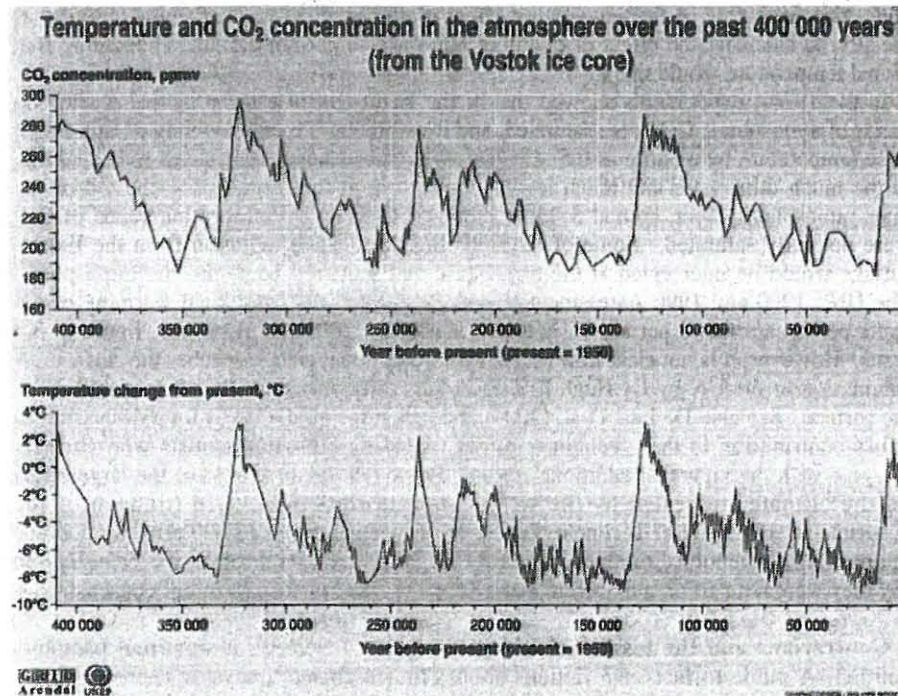
The "little ice age": The mediaeval warm period was followed by a 300-year "little ice age" until c. 1750. At the beginning of this period, mean temperatures dropped by 1.5° C in 100 years. The coldest period was c. 1550 to 1700 (Jones et al. 1998; Villalba 1990, 1994). Frost fairs were held on the frozen River Thames in London.

Not only is the mediaeval warm period not shown on the UN's graph of temperature over the past 1,000 years, the little ice age is also absent. From c. 1750, temperatures rose and held steady until the late Victorian era. These temperature fluctuations were not caused by humankind's activities. The UN's 1996 report included a graph illustrating them. By the time of the 2001 report, the UN had eradicated the mediaeval warm period.

The "hockey stick" graph controversy

The UN's 2001 graph, variously known as the "hockey stick" or "foxtail" or "J-curve", first appeared in *Nature* (Mann et al. 1998) and then, the following year, in *Geophysical Research Letters* (Mann et al. 1999). After its appearance in the UN's 2001 report, McIntyre et al. (2003, 2005) demonstrated that the erasure of the mediaeval warm period in the 2001 graph had been caused by inappropriate data selection and incorrect use of statistical methods.

The first mistake made by Mann et al., and copied by the UN in 2001, lay in the choice of proxy data. The UN's 1996 report had recommended against reliance upon bristlecone pines as proxies for reconstructing temperature, because 20th-century carbon dioxide fertilisation accelerated annual growth and caused a false appearance of exceptional recent warming. Notwithstanding the warning against reliance upon bristlecones in the UN's 1996 report, Mann et al. had relied chiefly upon a series of bristlecone-pine datasets for their reconstruction of mediaeval temperatures. Worse, their



Temperature and CO₂ concentration in the atmosphere over the past 400,000 years (Vostok ice core). For more detail, refer to http://maps.grida.no/go/download/mode/plain/f/26_large.jpg.

statistical model had given the bristlecone-pine datasets 390 times more prominence than the other datasets they had used.

To McIntyre et al., it appeared possible that Mann et al. had given the tainted bristlecone data series such exceptional prominence, effectively swamping all influence from the other datasets in their calculations, because the bristlecone-pine dataset produced the pronounced 20th-century uptick (and a corresponding suppression of evidence for mediaeval high temperatures), which would apparently eradicate the mediaeval warm period. To test this possibility, McIntyre et al. ran the algorithm of Mann et al. 10,000 times, having replaced all palaeoclimatological data with randomly generated, electronic "red noise". They found that—even with this entirely random data, altogether unconnected with the temperature record—the model nearly always constructed a "hockey stick" curve similar to that in the UN's 2001 report.

McIntyre and McKittrick (2003, 2005) also tested the algorithm of Mann et al. (1998; UN 2001) without the bristlecone-pine data, whereupon the mediaeval warm period reappeared. They also found that Mann et al. had excluded from their calculations a single dataset covering the later mediaeval warm period, which had been stored in a computer file marked "CENSORED DATA". McKittrick ran the Mann et al. model including the missing dataset, and again found that the mediaeval warm period reappeared.

Several eminent scientists have commented on the work of McIntyre and McKittrick. For instance, Richard Muller (2004), a physicist at Berkeley, said of the two Canadian scientists' work:

"That discovery hit me like a bombshell, and I suspect it is having the same effect on many others. Suddenly the hockey stick, the poster-child of the global warming community, turns out to be an artifact of poor mathematics."

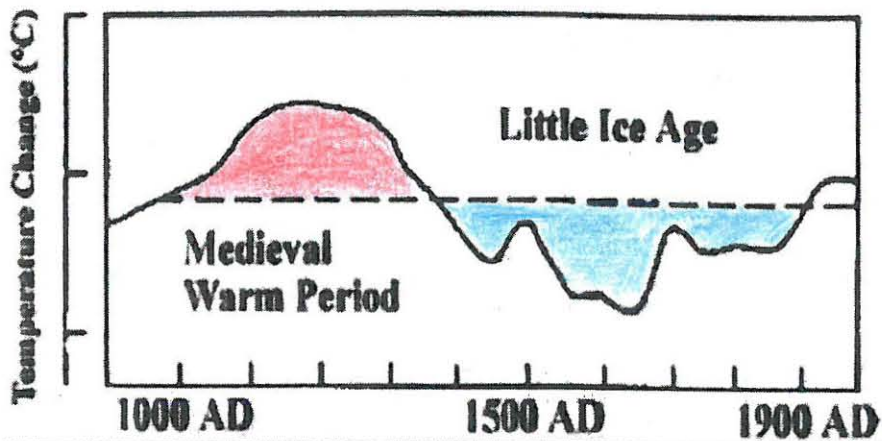
Dr Rob van Dorland (2005), of the Dutch National Meteorological Agency, said:

"It is strange that the climate reconstruction of Mann passed both peer review rounds of the IPCC without anyone ever really having checked it."

In February 2005, the German television channel Das Erste interviewed Ulrich Cubasch, a climatologist, who said that he had been unable to reproduce the Mann et al. "hockey stick" graph, whereupon he:

"...discussed the objections with his colleagues, and sought to work them through... Bit by bit, it became as clear to his colleagues as it had to him: the two Canadians were right. Between 1400 and 1600, the temperature shift was considerably higher than, for example, in the previous century. With that, the core conclusion, and also that of the entire IPCC 2001 Report, was completely undermined."

Dr Hendrik Tennekes, retired director of research at the Royal Meteorological Institute of The Netherlands, wrote to Dr McIntyre in 2005 to say:



Temperature history from the United Nations 1996 report, showing the mediaeval warm period.

"The IPCC review process is fatally flawed... The scientific basis for the Kyoto Protocol is grossly inadequate."

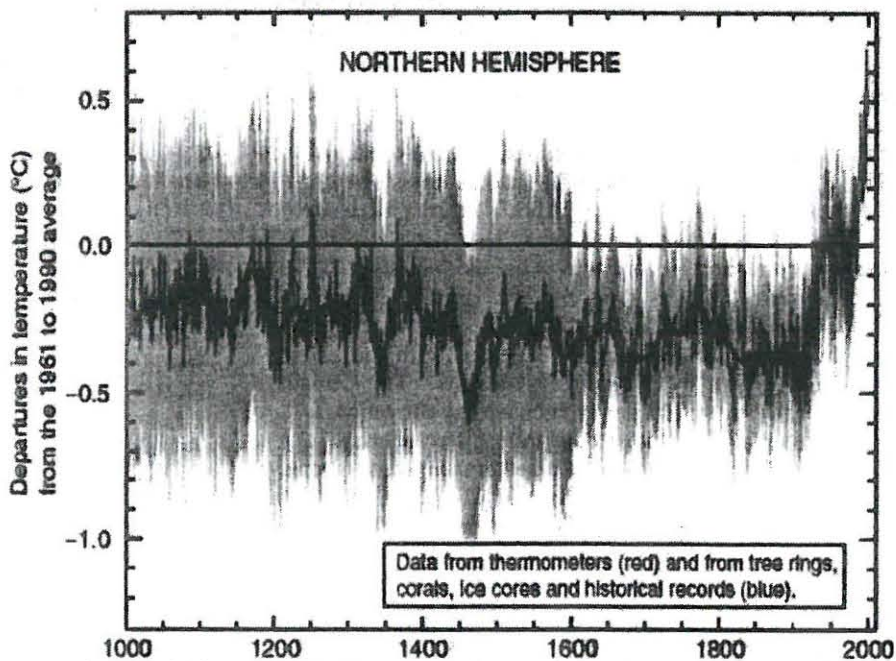
However, the fact that the central graph of the UN's 2001 report was defective has not had anything like as much attention from the media as the stories of impending disaster which politicians—and the UN itself—have derived from it.

The preface to the UN's 2001 report says the intention of its Climate Change Panel is to provide objective information as a basis for decisions by policymakers. The introduction adds:

"Since the release of the Second Assessment Report, additional data from new studies of current and palaeoclimates, improved analysis of data sets, more rigorous evaluation of their quality, and comparisons among data from different sources have led to greater understanding of climate change."

Despite "rigorous evaluation" by the UN, involving not one but two rounds of detailed scrutiny by peer review, the errors in the key temperature reconstruction graph were not detected—or, if they were detected, they were not corrected.

This defective graph is the only figure which was featured as many as six times in the UN's 2001 report, appearing with great



"Hockey stick" from UN 2001 report. The mediaeval warm period is absent.

prominence and in full colour on each occasion. The centrality of its importance to the case for alarm may be judged not only from the frequency and prominence of its appearance in the UN's 2001 report but also from the following conclusion, which appears in the Summary for Policymakers:

"New analyses of proxy data for the Northern Hemisphere indicate that the increase in temperature in the 20th century is likely to have been the largest of any century during the past 1,000 years. It is also likely that, in the Northern Hemisphere, the 1990s was the warmest decade and 1998 the warmest year (Figure 1b). Because less data are available, less is known about annual averages prior to 1,000 years before present and for conditions prevailing in most of the Southern Hemisphere prior to 1861."

The UN relied not only upon the flawed Mann et al. reconstruction but also upon a series of similar papers contributed to scientific journals, which seemed to support the abolition of the mediaeval warm period, as a report by the House of Lords Economic Affairs Committee (Lords 2005) pointed out.

However, an independent report by statisticians (US Senate 2005), perhaps the most devastating scientific criticism yet levelled at the UN on climate change, concluded not only that the UN's 2001 temperature reconstruction had used inappropriate statistical methods and data but also that many of the supporting scientific papers, both before and after the 2001 report, had been written by a small and closely connected group of palaeoclimatologists who effectively dominated their field worldwide and were all intimately linked to the principal author of the UN's 2001 graph.

It was not until prolonged pressure had been exerted upon the editors of *Nature* that a (less than complete) corrigendum was published (Mann et al. 2004).

Not only *Nature* but also other leading peer-reviewed scientific journals had refused to publish the first paper by McIntyre et al. (2003) exposing the flawed graph. Eventually, *Geophysical Research Letters* (McIntyre & McKittrick 2005) had the courage to break ranks and publish the truth.

The US National Academy of Sciences has since issued a statement that the "hockey stick" graph is defective. Significantly, however, the UN has issued no statement of apology or correction. It continues to use the "hockey stick" in its publications.

The Government of Canada circulated a copy of the graph to every household in the nation, together with the alarmist conclusion drawn by the United Nations. The Canadian Government did not subsequently circulate any correction.

Using comparisons among data from different sources, it is possible to answer the questions of whether there was a mediaeval warm period, whether it was global and whether it was warmer than the current warm period. The US Senate (2005) produced the following graph summarising the findings of several recent palaeoclimatological studies.

It is not likely that temperatures sufficiently high to keep southwest Greenland sufficiently free of ice to permit widespread cultivation, and to remove much or all of the north polar icecap

during the summer months, were a purely regional phenomenon.

Soon and Baliunas (2003) reviewed more than 200 proxy studies and concluded that the 20th century is probably not the warmest or a uniquely extreme climatic period of the last millennium. Their paper was heavily criticised by "consensus" scientists on the ground that the data in several of the studies were not temperature data. Four of the editors of the journal that published the paper resigned in protest at the failure of the peer-review process to prevent publication. Their reaction is in strong contrast with that of the editors of *Nature*, none of whom resigned once they knew that the "hockey stick" graph which they had published was defective, and of the UN, which failed to publish any correction after the six-times-repeated graph was confirmed to have been defective, and, as noted above, continues to use the defective graph in its publications.

To resolve the controversy, it is insufficient merely to rely upon the fact that the UN's graph was not fit for its purpose. It will be necessary to give an account of several of the independent proxy temperature studies published in recent years. The award-winning, contrarian website of the energetic Idso family of scientists, at <http://www.co2science.org>, provides clear and fair summary of papers relevant to the climate change debate. Their Mediaeval Warm Period database is relevant here.

To balance the considerable northern hemisphere evidence for the mediaeval warm period, some of which has already been discussed, here are a dozen studies from the southern hemisphere... [See full report. Ed.]

I conclude that today's temperatures are not exceptional, and that the mediaeval warm period was at least as warm as the present and probably up to 3° C warmer. However, its timing and extent varied somewhat from place to

place, as is to be expected given the mathematically chaotic nature of climate.

Editor's Note:

The full text of Christopher Monckton's research report, including discussion, calculations and references, is available at <http://www.telegraph.co.uk/news/graphics/2006/11/05/warm-refs.pdf>. Articles summarising his research were published in the London *Sunday Telegraph* on 5 and 12 November 2006 and are available at <http://www.telegraph.co.uk>.

For additional information, refer to Dr David E. Wojick's article "The UN IPCC's Artful Bias on Climate Change", published in NEXUS vol. 9, no. 6, 2002.

About the Author:

Christopher Monckton is The Viscount Monckton of Brenchley, born in 1952 and educated at Harrow, Churchill College, Cambridge, and University College, Cardiff. He has had a distinguished career as a journalist/editor, worked in the Prime Minister's Policy Unit in 1982-86, and in 1986 founded his public administration consultancy firm Christopher Monckton Ltd. He is the inventor of the Eternity and Sudoku X puzzles and the author of five *Daily Mail* Sudoku X books. He can be contacted by email at monckton@mail.com.

The US National Academy of Sciences has since issued a statement that the "hockey stick" graph is defective.

Significantly, however, the UN has issued no statement of apology or correction. It continues to use the "hockey stick" in its publications.



Spreckels Sugar Factory,
near Salinas, Cal.

4847

The Spreckels Sugar Factory, (Largest in the World) Spreckels, California

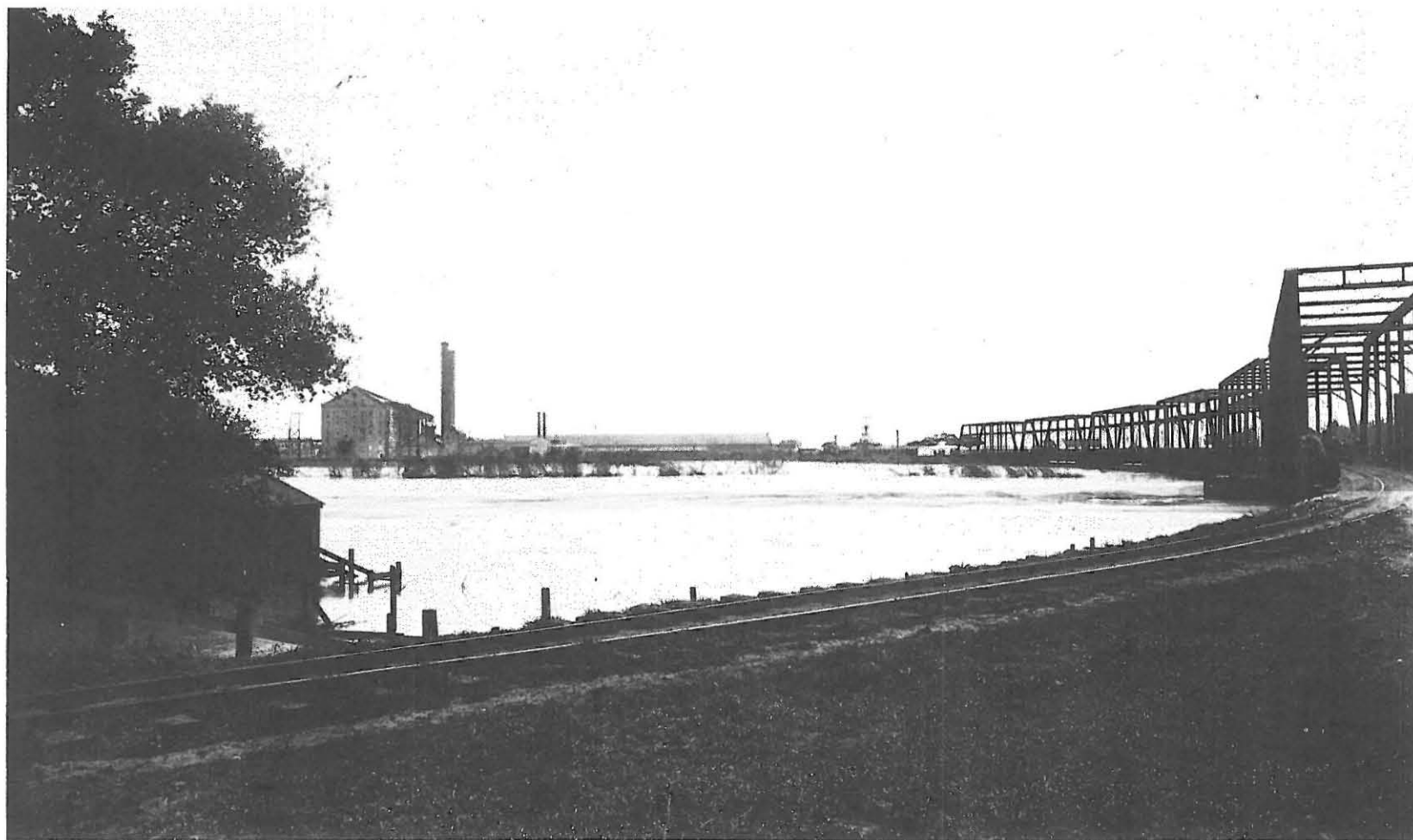




January 26, 1914. Severe winter storms off the Pacific Ocean have turned the underground Salinas River into a raging surface torrent. Above, a side view of the remaining bridge to the Buena Vista branch is pictured. Right, the Salinas River can be seen as it pounds the bridge. Following page, unable to stay within its previous boundaries, the Salinas River has left its banks and is raising havoc with the countryside. Photographs courtesy Miss Rose Rhyner, Spreckels Sugar Co. Collection



*Spreckels: the factory, the town, the railroad, and the brand new Salinas River Bridge to the Buena Vista branch.
Photograph courtesy Amstar, Spreckels Collection*



Sunday afternoon, January 25, 1914: The Salinas River is rising to an all-time high. This is perhaps the last view ever taken of the original alignment on the Buena Vista branch, for by the following morning the three near spans would be gone and the west approach to the bridge forever changed. Photograph courtesy Miss Rose Rhyner, Spreckels Sugar Co. Collection