



Board of Directors

Belia Bennett  
Susan Boswell  
Diane Dillon  
Marita Dorenbecher  
Warren Flint  
Mitchell Klug  
Gary Kraus  
Jason Lauritsen  
Jim Lincoln  
Mark Luce  
Marc Pandone  
Matt Pope  
Jeffrey Redding  
Jeff Reichel  
Scott Sedgley  
Rita Steiner  
Peter White

Alternate

Keith Caldwell

Staff

Patrick Lowe,  
Secretary  
Natural Resources  
Conservation  
Manager,  
Dept. Public Works  
  
Jeff Sharp,  
Principal Planner,  
Dept. Public Works

Laura Anderson,  
Legal Counsel  
Attorney IV,  
County Counsel's  
Office

804 First Street,  
Napa, CA  
94559-2623

Tel: 707-259-8600

[info@napawatersheds.org](mailto:info@napawatersheds.org)

## AGENDA

### REGULAR BOARD MEETING

Thursday, January 24, 2012, 4:00 p.m.

2nd Floor Conference Room, Hall of Justice Building,  
1125 Third Street, Napa CA

**1. CALL TO ORDER & ROLL CALL (Chair)**

Welcome to **Scott Sedgley**, newly appointed City of Napa Council representative and **Matt Pope** Napa County Planning Commission representative, followed by roundtable of introductions

**2. APPROVAL OF ACTION MINUTES**

Meeting of November 15, 2012 (Chair) (5 min)

**3. PUBLIC COMMENT**

In this time period, anyone may comment to the Board regarding any subject over which the Board has jurisdiction, or request consideration to place an item on a future Agenda. No comments will be allowed involving any subject matter that is scheduled for discussion as part of this Agenda. Individuals will be limited to a three-minute presentation. No action will be taken by the Board as a result of any item presented at this time. (Chair)

**4. DISCUSSION AND ACTION:**

- a. **Election of Chair and Vice-Chair** for 2013 (per Bylaws§ II.A.) (Board; WICC Staff) (5 min)
- b. Discussion and **adoption of 2013 Meeting Calendar** (per Bylaws§ III.A.) (Board; WICC Staff) (5 min)

**5. UPDATES, REPORTS AND DISCUSSION**

- a. Report on Board of Supervisor's approval to amend WICC Board bylaws on January 29, 2013 (WICC Staff) (5 min)

(Cont.)

5. **UPDATES, REPORTS AND DISCUSSION** (*Cont.*)
  - b. Update on Napa County **Groundwater Resources Advisory Committee** (GRAC) (Patrick Lowe, Natural Resources Conservation Manager, Public Works) (*5 min*)
  - c. Update on **Integrated Regional Water Management Planning** (IRWMP) in the Bay Area and Sacramento River funding areas, planning and plan update processes, grant deadlines and list of projects (WICC staff, Flood District staff) (*5 min*)
  - d. Update on status of the **Napa River Sediment TMDL** and **Vineyard Waiver** and extended public comment period (WICC staff) (*5 min*)
  - e. Other reports and updates (WICC staff, Board, Public)
  
6. **PRESENTATIONS AND DISCUSSION**

Presentation and discussion on the **Napa River Watershed Profile: A watershed-based framework for addressing agricultural management challenges related to improving the health of the Napa River ecosystem** (Meredith Williams, Deputy Director, San Francisco Estuary Institute) (*30 min*)
  
7. **INFORMATIONAL ANNOUNCEMENTS**

Presentation of **informational announcements and events** (WICC staff, Board, and Public) (*5-10 min*)
  
8. **FUTURE AGENDA ITEMS**

Discussion of possible **items for future agendas** (Board, WICC Staff) (*5 min*)

  - a. Presentation by Sustainable Conservation ([www.suscon.org](http://www.suscon.org)) on their “Partners in Restoration” approach to coordinated permitting for restoration projects
  - b. Other potential items (WICC staff, Board)
  
9. **NEXT MEETING** (Chair)

Regular Scheduled Board Meeting:  
**March 28, 2013 – 4:00 PM** (*Save the date*)
  
10. **ADJOURNMENT** (Chair)

**Note:** If requested, the agenda and documents in the agenda packet shall be made available in appropriate alternative formats to persons with a disability. Please contact Jeff Sharp at 707-259-5936, 804 First St., Napa CA 94559-2623.





Board of Directors

Diane Dillon  
Mark Luce  
Peter White  
Gary Kraus  
James Krider  
Belia Bennett  
Marita Dorenbecher  
Mike Basayne  
Jeff Reichel  
Rita Steiner  
Jeffrey Redding  
Susan Boswell  
Jim Lincoln  
Marc Pandone  
Warren Flint  
Mitchell Klug  
Jason Lauritsen

Alternate

Keith Caldwell

Staff

Representatives

Patrick Lowe,  
Secretary  
Nat. Resources  
Conservation  
Program Manager,  
Dept. Public Works

Jeff Sharp,  
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# ACTION MINUTES

## SPECIAL BOARD MEETING

Thursday, November 15, 2012, 4:00 p.m.

The White Barn  
2727 Sulphur Springs Ave., St. Helena, CA

### 1. CALL TO ORDER & ROLL CALL (Chair)

**Welcome to The White Barn** (Garden Family; WICC Staff)

*Members Present:* Peter White; Gary Kraus; Belia Bennett; Marita Dorenbecher; Mike Basayne; Jeff Reichel; Susan Boswell; Jim Lincoln; Jason Lauritsen; Keith Caldwell

*Members excused:* Diane Dillon, Mark Luce; Rita Steiner; Warren Flint

*Members absent:* James Krider; Jeffrey Redding; Marc Pandone; Mitchell Klug

*Staff present:* Patrick Lowe, Jeff Sharp

*Due to the absence of both the Chair and Vice Chair, Jeff Reichel volunteered to chair the meeting with the agreement of the Board.*

### 2. APPROVAL OF ACTION MINUTES

Meeting of **March 22, 2012** and Special Joint Meeting of **July 26, 2012** (Chair) (5 min)

*Approved as presented*

| MB | BB | SB | DD | MD | WF | MK | GK | JK | JL1 | JL2 | ML | MP | JR1 | JR2 | RS | PW | KC |
|----|----|----|----|----|----|----|----|----|-----|-----|----|----|-----|-----|----|----|----|
|    |    |    | X  |    | X  | X  | A  | X  |     |     | X  | X  | X   |     | X  |    |    |

### 3. PUBLIC COMMENT

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*None presented*

(Cont.)

**4. DISCUSSION AND ACTION**

- a. Discussion and **direction on DRAFT 2013 Meeting Calendar** (Board; WICC Staff) (5 min)

*The November meeting date was corrected to November 21<sup>st</sup> by staff. The Board concurred with the amended draft and directed staff to bring the final calendar back for adoption in January.*

- b. Discussion and **adoption of revised Bylaws** (Board; WICC Staff) (5 min)

*Staff outlined the recommended changes to the bylaws. The Board motioned and approved adoption of the bylaws as presented and requested Board of Supervisor approval.*

| MB | BB | SB | DD | MD | WF | MK | GK | JK | JL1 | JL2 | ML | MP | JR1 | JR2 | RS | PW | KC |
|----|----|----|----|----|----|----|----|----|-----|-----|----|----|-----|-----|----|----|----|
|    |    |    | X  |    | X  | X  |    | X  |     |     | X  | X  | X   |     | X  |    |    |

**5. UPDATES, REPORTS AND DISCUSSION**

- a. Update on the Napa County **Groundwater Resources Advisory Committee (GRAC)** work plan/schedule and upcoming meeting topics (WICC Staff) (5 min)

*Staff provided an update on recent GRAC activities, work plan milestones and future meeting dates.*

**5. UPDATES, REPORTS AND DISCUSSION (Cont.)**

- b. Update on **Integrated Regional Water Management Planning (IRWMP)** in the Bay Area (Napa River Basin) and Sacramento River (Putah and Suisun Basin) funding areas, planning and plan update processes, grant timeline and list of projects (WICC staff, Fld. Dist. staff) (10 min)

*Staff briefly outlined the State’s IRWMP program and current Prop 84 funding opportunities. Staff provided an overview of the recent ‘call for projects’ by both the Bay Area and Sacramento River funding areas. Stakeholder processes are underway in both regions to refine and select projects for competitive funding being offered by the State under Round 2 of IRWMP Implementation Grant program. Staff will continue to update the Board as projects are selected and grant funding requests are submitted.*

- c. Update and discussion on status of the **Napa River Sediment TMDL and Vineyard Waiver** development (Brian Bordona, Supervising Planner, Napa Co. Planning, Building and Environmental Services / member of waiver Stakeholder Advisory Group) (15 min)

*Brian Bordona provided the Board with presentation and overview of the proposed waiver and announced release of the draft waiver and related CEQA documents for public review and comment.*

- d. Report on publication and distribution of the **2013 Watershed Awareness Calendar**, “Preserving and Restoring the Oaks of Napa County” (Stephanie Turnipseed, Education Coordinator, Napa Co. RCD) (5 min)

*Stephanie Turnipseed presented the Board with copies of the 2013 calendar and talked about this year’s education topic – Oaks in Napa County*

- e. Report and discussion on the **2013 Watershed Symposium** and possible theme/topics for the event (WICC Staff) (10 min)

*Staff announced that the 2013 Symposium is being planned for May 23<sup>rd</sup>. The Board provided input of possible topics to include in the event including: local climate change issues, re-oaking the valley, sudden oak death, fisheries monitoring and populations, coordinated restoration permitting, and an update on river restoration efforts,*

- f. Other reports and updates (WICC Staff, Board, Public)

*Staff reported that the new general municipal stormwater NPDES permit is due out for public review and comment November 16, 2013. Staff will email the notice to the Board upon its publication.*

**6. PRESENTATIONS AND DISCUSSION**

- a. Presentation on **2012 Stream Maintenance and Operations Projects** (Shuan Horne, Watershed and Flood Control Resource Specialist, Napa County Flood Control and Water Conservation Dist.) (25 min)

*Shuan Horne provided a presentation to the Board on the District’s 2012 projects.*

- b. Presentation and discussion on **Low Impact Roads – Reducing Road Related Sediment Inputs into our Stream Systems** (Bill Birmingham, Conservation Project Manager, Napa County RCD) (35 min)

*Bill Birmingham provided a presentation to the Board on designing Low Impact Roads.*

**7. INFORMATIONAL ANNOUNCEMENTS**

Presentation of informational announcements / events (WICC staff, Board, Public)

*None presented.*

**8. FUTURE AGENDA ITEMS**

Discussion of possible **items for future agendas**: Napa Tree Forum, Heritage Tree Protection, Coordinated Permitting, others (Board, WICC Staff)

*Patrick Lowe mentioned that a Tree Forum may be held in February or March in the City of Napa.*

**9. NEXT MEETING (Chair)**

Regular Scheduled Board Meeting: **January 24, 2012 – 4:00 PM**

*Staff noted that the Board will elect a new chair and vise chair at their January meeting.*

**10. ADJOURNMENT (Chair)**

*Motion and approval to adjourn.*

| MB | BB | SB | DD | MD | WF | MK | GK | JK | JL1 | JL2 | ML | MP | JR1 | JR2 | RS | PW | KC |
|----|----|----|----|----|----|----|----|----|-----|-----|----|----|-----|-----|----|----|----|
|    |    |    | X  |    | X  | X  |    | X  |     |     | X  | X  | X   |     | X  |    |    |

**Note:** If requested, the agenda and documents in the agenda packet shall be made available in appropriate alternative formats to persons with a disability. Please contact Jeff Sharp at 707-259-5936, 804 First St., Napa CA 94559-2623.



**Voting Key**

If not unanimous, votes will be tallied (N = No; A = Abstained, X = Excused) using the following Board Member abbreviations: MB = Mike Basayne; BB = Belia Bennett; SB = Susan Boswell;; DD = Diane Dillon; MD = Marita Dorenbecher, WF = Warren Flint, MK = Mitchell Klug; GK = Gary Kraus; JK = James Krider; JL1 = Jason Lauritsen; JL2 = Jim Lincoln; ML = Mark Luce; MP = Marc Pandone; JR1 = Jeffrey Redding; JR2 = Jeff Reichel; RS = Rita Steiner; PW = Peter White; KC = Keith Caldwell (alternate)

**Example Key:**

| <b>MB</b> | <b>BB</b> | <b>SB</b> | <b>DD</b> | <b>MD</b> | <b>WF</b> | <b>MK</b> | <b>GK</b> | <b>JK</b> | <b>JL1</b> | <b>JL2</b> | <b>ML</b> | <b>MP</b> | <b>JR1</b> | <b>JR2</b> | <b>RS</b> | <b>PW</b> | <b>KC</b> |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|------------|------------|-----------|-----------|-----------|
|           |           | X         |           |           | A         |           |           | N         |            |            |           | A         |            |            |           |           |           |



4a. **Election of new Chair and Vice-Chair** for year 2013 (per Bylaws§ II.A.) (Board; WICC Staff)

4b. Discussion and **adoption of 2013 Meeting Calendar** (per Bylaws§ III.A.) (Board; WICC Staff)

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**EXCERPT FROM THE BYLAWS OF THE WICC BOARD**

Excerpt regarding election of officers:

**II. OFFICERS.** The officers of the WICC Board shall be the Chair, Vice-Chair and Secretary, chosen as follows:

**A. Time of Election of the Chair and Vice-Chair.**

At the first organizational meeting and thereafter at the WICC Board's annual organizational meeting, the membership of the WICC Board shall elect the Chair and Vice-Chair from among themselves.

Excerpt regarding adoption of yearly calendar:

**III. MEETINGS**

**A. Date of Regular Meetings.**

... the WICC Board shall adopt at the first meeting of the WICC Board, of each calendar year. Notwithstanding the foregoing, any regularly scheduled meeting of the WICC Board may be canceled by majority vote or, if there is not a quorum, be adjourned by the Chair or Secretary in the manner set forth in Section III(G) of these by-laws.



A Tradition of Stewardship  
A Commitment to Service



# WICC

## Board of Directors

# 2013 Meeting Calendar

**Members:**

- Belia Bennett
- Susan Boswell
- Diane Dillon
- Marita Dorenbecher
- Warren Flint
- Mitchell Klug
- Gary Kraus
- Jason Lauritsen
- Jim Lincoln
- Mark Luce
- Marc Pandone
- Matt Pope
- Jeffrey Redding
- Jeff Reichel
- Scott Sedgley
- Rita Steiner
- Peter White

**Alternate:**

- Keith Caldwell

**Staff:**

- Patrick Lowe
- Secretary
- Natural Resources
- Conservation Manager
- Public Works
- Jeff Sharp
- Principal Planner
- Public Works
- Laura Anderson
- Legal Counsel
- County Counsel's Office

**Meeting Details**

Time: 4:00 PM

Location:

2nd Flr. Conference Room  
Hall of Justice Building  
1125 Third St., Napa CA

These are public meetings,  
all are welcome to attend.

Time and location may change  
as directed by the Board.

**January**

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
|    |    | 1  | 2  | 3  | 4  | 5  |
| 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 |    |    |

**February**

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
|    |    |    |    |    | 1  | 2  |
| 3  | 4  | 5  | 6  | 7  | 8  | 9  |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 |    |    |

**March**

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| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 |    |    |    |    |    |

**April**

| S  | M  | T  | W  | T  | F  | S  |
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| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 |    |    |    |    |

**May**

| S  | M  | T  | W  | T  | F  | S  |
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| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | 31 |    |

**June**

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| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 |    |    |    |    |    |    |

**July**

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
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| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 |    |    |    |

**August**

| S  | M  | T  | W  | T  | F  | S  |
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| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

**September**

| S  | M  | T  | W  | T  | F  | S  |
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| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
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**October**

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
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| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 |    |    |

**November**

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
|    |    |    |    |    | 1  | 2  |
| 3  | 4  | 5  | 6  | 7  | 8  | 9  |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

**December**

| S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  |
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| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 |    |    |    |    |

○ - Regular Meeting Dates

[www.napawatersheds.org](http://www.napawatersheds.org)





A Tradition of Stewardship  
A Commitment to Service

Agenda Date: 1/29/2013

Agenda Placement:

## NAPA COUNTY BOARD OF SUPERVISORS Board Agenda Letter

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**TO:** Board of Supervisors

**FROM:** Steven Lederer - Director of Public Works  
Public Works

**REPORT BY:** Jeff Sharp, PRINCIPAL PLANNER - 707-259-5936

**SUBJECT:** Resolution amending the bylaws of the Watershed Information Center and Conservancy (WICC)  
Board of Napa County

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### RECOMMENDATION

Director of Public Works and the Watershed Information Center and Conservancy (WICC) Board of Napa County request adoption of a resolution amending the bylaws of the WICC to reflect the reorganization of County staff and services, to modify the regular meeting dates of the WICC Board to every other month, and to update the WICC bylaw language regarding motions to reconsider.

### EXECUTIVE SUMMARY

Since creation of the WICC Board in 2002, the Board of Supervisors has adopted several resolutions updating the role and structure of the WICC. Those changes are reflected in the WICC's bylaws. Since the WICC is an advisory committee, only the Board of Supervisors can amend the WICC's bylaws. Due to the recent reorganization and consolidation efforts within the Department of Public Works and the current Department of Planning, Building and Environmental Services, the WICC program has been relocated to Public Works and is supported by the Water Resources Division/Natural Resources Conservation staff. To effectively support both the WICC Board and the Napa County Groundwater Resources Advisory Committee (GRAC), regularly scheduled WICC meetings have been reduced to every other month, alternating with GRAC meetings. Since the WICC bylaws have not been updated since 2006, language consistent with other boards and committees related to motions to reconsider is being recommended. On November 15, 2012, the WICC Board reviewed and concurred with the recommended changes to its bylaws and requested Board of Supervisors approval. The proposed resolution would amend the the WICC bylaws to assign proper staff in the Water Resources Division as Secretary to the WICC, modify the WICC Board meeting schedule to every other month, and update language in the bylaws related to motions to reconsider.

**FISCAL IMPACT**

Is there a Fiscal Impact?                      No

**ENVIRONMENTAL IMPACT**

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

**BACKGROUND AND DISCUSSION**

On May 21, 2002 the Board of Supervisors created the WICC Board with the intent to establish a Watershed Information Center that would become a long-term watershed resource management program to provide public outreach and education, monitoring coordination, inventory and assessment, and data management. The Board of Supervisors adopted the WICC Board's Strategic Plan on November 1, 2005. The adopted plan includes action items to help achieve the WICC Board's mission, as well as recommendations to obtain adequate resources, seek funding, and establish the appropriate organizational structure to ensure the WICC's long-term success.

The Board of Supervisors has also adopted several resolutions updating the role and structure of the WICC. Those changes are reflected in the WICC's bylaws. Since the WICC is an advisory committee, only the Board of Supervisors can amend the WICC's bylaws.

The proposed resolution would amend the WICC bylaws to reflect changes in staffing and program assignments resulting from the recent reorganization and consolidation of services between the Department of Public Works and the current Department of Planning, Building and Environmental Services. The reorganization relocated the WICC program and the Napa County Groundwater Resources Advisory Committee (GRAC) to Public Works where it is supported by the Water Resources Division/Natural Resources Conservation staff. As there is a need to effectively staff both the WICC and the GRAC, it is recommended that the WICC Board's meeting schedule be reduced to every other month, alternating with scheduled GRAC meetings. Given staffing changes resulting from the reorganization effort, the Natural Resources Conservation Manager has been assigned as Secretary to the WICC. The WICC bylaws should reflect new staffing assignments and, since the bylaws have not been updated since 2006, language consistent with other boards and committees related to motions to reconsider is also being recommended.

On November 15, 2012, the WICC Board reviewed and concurred with the recommended changes to its bylaws and requested Board of Supervisors approval.

Director of Public Works, on behalf of the WICC Board, is requesting the Board of Supervisors adopt the attached resolution amending the bylaws of the WICC Board of Napa County to reflect the reorganization of County services, modify the WICC's regular meeting dates, and update bylaw language regarding motions to reconsider.

**SUPPORTING DOCUMENTS**

A . Resolution

**RESOLUTION NO. 2013-\_\_\_\_\_**

**RESOLUTION OF THE BOARD OF SUPERVISORS OF NAPA COUNTY,  
STATE OF CALIFORNIA, AMENDING THE BYLAWS OF, AND  
EXTENDING THE LIFE OF THE WATERSHED INFORMATION CENTER  
AND CONSERVANCY BOARD OF NAPA COUNTY INDEFINITELY**

**WHEREAS**, on May 21, 2002, the Board adopted Resolution No. 02-103 creating the joint Napa River Watershed Conservancy and Watershed Information Center Board which was later renamed the Watershed Information Center and Conservancy of Napa County (“WICC”);

**WHEREAS**, since creation of the WICC in 2002, the Board of Supervisors has adopted several resolutions affecting the role and structure of the WICC and those changes need to be memorialized and incorporated into the WICC’s bylaws. Since the WICC is an advisory committee, its bylaws can only be amended by the Board of Supervisors;

**WHEREAS**, due to the recent reorganization and consolidation efforts within the Department of Public Works and the current Department of Planning, Building and Environmental Services, the WICC program has been relocated to Public Works and is supported by the Water Resources Division/Natural Resources Conservation staff;

**WHEREAS**, to effectively support both the WICC Board and the Napa County Groundwater Resources Advisory Committee (GRAC), regularly scheduled WICC meetings have been reduced to every other month, alternating with GRAC meetings;

**WHEREAS**, the proposed resolution amends the WICC bylaws to assign proper staff in the Water Resources Division as Secretary to the WICC, modify the WICC Board meeting schedule to every other month, and update language in the bylaws relating to motions to reconsider.

**NOW THEREFORE, BE IT RESOLVED**, by the Board of Supervisors as follows:

**Section 1. Amendment of bylaws.**

The WICC’s bylaws are hereby amended to reflect reorganization of county services, modify the WICC’s regular meeting dates, and update bylaw language regarding motions to reconsider as shown in the bylaws attached.

**Section 2. Placement of Resolution in Policy Manual.**

The County Executive Officer is hereby directed to place a copy of this Resolution, or appropriate summary thereof, in Part II of the County Policy Manual, in Section 28.<sup>1</sup>

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<sup>1</sup> Previously placed in County Policy Manual, Part II as Section 24.

Section 3. Effective Date.

This resolution shall become effective upon adoption.

The foregoing resolution was duly and regularly adopted by said Board of Supervisors of Napa County, State of California, at a regular meeting of said Board held on the 29<sup>th</sup> day of January, 2013, by the following vote:

AYES: SUPERVISORS \_\_\_\_\_

\_\_\_\_\_

NOES: SUPERVISORS \_\_\_\_\_

ABSENT: SUPERVISORS \_\_\_\_\_

\_\_\_\_\_

BRAD WAGENKNECHT, Chairman  
Napa County Board of Supervisors

ATTEST: GLADYS I. COIL  
Clerk of the Board of Supervisors

By: \_\_\_\_\_

**APPROVED AS TO FORM**  
Office of County Counsel  
By: Laura J. Anderson (by e-signature)  
Date: January 14, 2013

**APPROVED BY THE NAPA COUNTY  
BOARD OF SUPERVISORS**  
Date: \_\_\_\_\_  
Processed by:  
\_\_\_\_\_  
Deputy Clerk of the Board

Attachment – Amended Bylaws

**NAPA COUNTY POLICY MANUAL, PART II, SECTION 28**

Deleted: 24

**BYLAWS OF THE WATERSHED INFORMATION CENTER AND  
CONSERVANCY BOARD OF NAPA COUNTY**

(adopted December 18, 2002; amended January 22, 2004; amended June 24,  
2004; amended April 25, 2006; [amended January 29, 2013](#))

**I. THE WATERSHED INFORMATION CENTER AND CONSERVANCY BOARD  
OF NAPA COUNTY**

- A. Name.** The official name of the Board shall be the Watershed Information Center and Conservancy Board of Napa County, hereinafter referred to as the “WICC Board.” (per Resolution No. 04-102)

**II. OFFICERS.** The officers of the WICC Board shall be the Chair, Vice-Chair and Secretary, chosen as follows:

- A. Time of Election of the Chair and Vice-Chair.** At the first organizational meeting and thereafter at the WICC Board’s annual organizational meeting, the membership of the WICC Board shall elect the Chair and Vice-Chair from among themselves.
- B. Term of the Chair and Vice-Chair.** The Chair and Vice-Chair shall serve one calendar year or until their successors are elected and assume office. If the office of Chair becomes vacant during the term, the Vice-Chair shall become Chair. Vacancy in the office of Vice-Chair during the term shall be filled by election to serve the remainder of the term.
- C. Duties of the Chair and Vice-Chair.** The Chair, or the Vice Chair in the absence of the Chair, shall act as the presiding officer of WICC Board and in that capacity shall preserve order and decorum, decide questions of order subject to being overruled by a two-thirds vote and perform such other duties as are required by the WICC Board. The Chair shall have all the rights and duties enjoyed by any other member of the WICC Board, including the right to make and second motions.
- D. Secretary.** [The Natural Resources Conservation Manager, in the Water Resources Division](#) of the [Public Works](#) Department, shall serve ex officio as the Secretary of the WICC Board.
- E. Authority to Bind WICC Board.** No member of the WICC Board shall have any power or authority to bind the WICC Board by any contract, to pledge its credit, or to render it liable for any purpose in any amount.

Deleted: Deputy Director

Deleted: Conservation Division of the Napa County Conservation, Development and Planning

**F. Term of WICC Board members.** Each member of the WICC Board shall serve for a period of four (4) years. Members serving on the WICC Board as elected officials and the alternate member acting for the County Board of Supervisors shall serve the same term as their elected office.

**G. Service and termination of WICC Board membership.**

1. **Service.** Members appointed to the WICC Board by the County Board of Supervisors shall serve at the will and pleasure of the County Board of Supervisors.
2. **Termination.** A WICC Board member's term may be concluded before expiration if any one of the following events occurs:
  - a. His or her absence from three consecutive regular meetings during the term year, unless confined by illness or other absence approved by a majority of the WICC Board at any meeting thereof, will be considered as having involuntarily resigned her/his position as a member of the WICC Board.
  - b. His or her resignation is submitted to the Chair.
  - c. His or her ceasing residency in Napa County.
  - d. His or her conviction of a felony or any offence involving a violation of his or her official duties.
  - e. Refusal or neglect to file the required oath of office.

**III. MEETINGS**

- A. **Date of Regular Meetings.** All dates of regular meetings of the WICC Board shall be on the fourth Thursday of every other month beginning in January, apart from November, when the meeting shall be held on the third Thursday, as shown on a calendar, which the WICC Board shall adopt at the first meeting of the WICC Board, of each calendar year. Notwithstanding the foregoing, any regularly scheduled meeting of the WICC Board may be canceled by majority vote or, if there is not a quorum, be adjourned by the Chair or Secretary in the manner set forth in Section III(G) of these by-laws.
- B. **Time of Regular Meetings.** Regular meetings shall commence at 4:00 pm and continue until all agendaed business is concluded unless adjourned earlier on motion of the WICC Board for any reason or by the Secretary for lack of a quorum.
- C. **Location of Regular Meetings.** Unless specially noticed otherwise, regular

meetings shall be held at 1125 Third Street, Hall of Justice Building, 2<sup>nd</sup> Floor Meeting/Training Room, Napa, California.

- D. Emergency Meetings.** Emergency meetings shall be called in conformance with Section 54956.5 of the California Government Code
- E. Special Meetings.** A special meeting may be called at any time by the Chairman or upon the request of a majority of the members of the WICC Board by delivering written notice to each member and to each person or entity entitled by law to receive such notices in the manner required by Government Code Section 54956 at least 24 hours before the time of the meeting as specified in the notice. The call and notice shall specify the time and place of the special meeting and the business to be transacted or discussed and shall be posted at least 24 hours prior to the special meeting in a location that is freely accessible to members of the public. No other business shall be considered at such meetings by the WICC Board. Such written notice may be dispensed with as to any WICC Board member who at or prior to the time the meeting convenes files with the Secretary of the WICC Board a written waiver of notice. Such waiver may be given by telegram. Such written notice may also be dispensed with as to any member who is actually present at the time the meeting convenes.
- F. Agendas Involving Regular Meetings.** At least 72 hours before a regular meeting, an agenda containing a brief general description of each item of business to be transacted or discussed shall be posted at a location freely accessible to members of the public. All agendas shall include a time period for public comment and shall specify the time and location of the regular meeting. No discussion shall occur, or action be taken, on any item not appearing on the posted agenda except as permitted by law. Questions or comments regarding items not included on the agenda shall be limited to the scope permitted for “public comment”. Supplemental agendas involved in a regular meeting will be prepared and considered by the WICC Board only under the following conditions:
- 1. Emergencies.** Upon a determination by the WICC Board that an emergency situation exists, as defined in Section 54956.5 of the Government Code.
  - 2. Need Arising after Posting.** Upon a determination by a two-thirds vote of the WICC Board or, if less than two-thirds of the potential votes are present, a unanimous vote of the WICC Board members present, that there is a need to take immediate action and the need to take action came to the attention of WICC Board or staff subsequent to the regular agenda being posted.
  - 3. Recently Continued Item.** The item was properly posted for a prior meeting of the WICC Board occurring not more than five calendar days prior to the date action is taken on the item, and at the prior meeting the

item was continued to the meeting at which action is being taken.

- G. Adjourning Meetings.** The WICC Board may adjourn any meeting to a time and place specified in the order of adjournment. Less than a quorum may so adjourn from time to time. If all WICC Board members are absent from any regular meeting or adjourned regular meeting the Secretary or Acting Secretary of the WICC Board may declare the meeting adjourned to the next regular meeting of the WICC Board. A copy of the order or notice of adjournment shall be conspicuously posted on or near the door of the place where the meeting was held within 24 hours after the time of the adjournment. When a regular or adjourned regular meeting is adjourned as provided in this section, the resulting adjourned regular meeting is a regular meeting for all purposes. When an order of adjournment of any meeting fails to state the hour at which the adjourned meeting is to be held, it shall be held at the hour specified for regular meetings.
- H. Meetings to be Open and Public.** All meetings of the WICC Board to take action or to deliberate concerning WICC Board business and its conduct shall be open and public. All persons shall be permitted to attend any such meetings except as otherwise provided or permitted by law.

#### IV. CONDUCT OF MEETINGS

- A. Order of Business.** The regular order of business of the WICC Board shall be:
1. Call to order.
  2. Approval of the minutes of the previous meeting.
  3. Public comment on unagendized items.
  4. Consideration and Action on Agenda Items.
  5. Adjournment.

**B. Parliamentary Procedure.** Unless otherwise provided by these Bylaws, all proceedings before WICC Board shall be conducted in accordance with and pursuant to the parliamentary procedure prescribed in [the most current version of the Sturgis "Standard Code of Parliamentary Procedure."](#)

Deleted: "Sturgis Standard Code of Parliamentary Procedure, 3rd edition."¶

- C. Recording of Meetings.** Any meeting of the WICC Board, other than a closed session permitted under the Brown Act, may be recorded by any person, unless the WICC Board determines that such recording could constitute a disruption of the proceedings.
- D. Presentations to the Board.** Any person desiring to address the WICC Board shall, when recognized by the Chair, give his or her name and address. The



Chair may, in the interest of facilitating the business of WICC Board, set in advance of the presentation of testimony reasonable time limits for oral presentations. Persons may be required to submit written testimony in lieu of oral testimony if the Chair determines that a reasonable opportunity for oral presentations has been provided, and in such a case, the matter may be continued to a later date to allow a reasonable time for such submittals to occur.

- E. **Recordation of Board Actions.** All official actions or decisions by the WICC Board shall be documented and kept by the Secretary. The vote or votes of each member of the WICC Board on every question shall be recorded. Only action minutes will be maintained, however, tape recordings will be made of each meeting of the WICC Board whenever possible and shall be available to the public at the WICC Board offices.

**Deleted:** entered in the minute book of the WICC Board

## V. VOTING AND QUORUM

- A. **Roll Call Vote.** A roll call vote may be required in voting upon any motion of the WICC Board at the discretion of the Chair.
- B. **Inaudible Votes.** Any member present who does not vote in an audible voice or abstains for a legally insufficient reason shall be recorded as voting "aye".
- C. **Quorum.** A majority of the members of the WICC Board shall constitute a quorum for the purpose of conducting its business and exercising its powers and for all other official purposes, except that less than a quorum may adjourn from time to time until a quorum is obtained.
- D. **Number of Votes Required for Action.** All actions require a motion and a second. No action or recommendation of the WICC Board shall be valid and binding unless a quorum is present and the motion is approved by at least a majority of the members present. Each member shall have one vote. No votes may be cast by proxy. Tie votes shall be considered as denial of the motion.
- E. **Voting Affected by Conflict of Interest.** As a general rule, no member shall participate as a member in any discussion or voting if to do so would constitute a conflict of interest. However, if a quorum cannot be achieved or the required number of affirmative votes for action obtained because conflicts of interest exist that prevent members having such conflicts from discussing or voting on the matter, and the conflicts are such that the members with conflicts will be unable to vote at a later date even if the matter is continued, the matter shall not be continued and a sufficient number of members having conflicts of interest, selected by lot, shall be allowed to participate to provide enough votes for the WICC Board to form a quorum and take affirmative action.

**Deleted: F. Motion to Reconsider.**

**Deleted:** The WICC Board may reconsider a matter during the meeting at which the vote was taken, provided all members who were present when the matter was discussed and voted upon are still present, provided that all persons who addressed the WICC Board regarding the matter are still present, and provided the motion to reconsider is made by a member who voted with the prevailing side. A motion for reconsideration shall have precedence over every motion except a motion to adjourn. A final vote on any matter may also be placed on any future agenda for reconsideration by the WICC Board or any member of the WICC Board at the meeting at which the actions was taken or at any later time. Any interested person may request that an action be reconsidered, provided that such a request must be in writing and filed with the Secretary of the WICC Board within ten calendar days of the action of the WICC Board.

1. A final vote on any matter before the WICC Board may be reconsidered

during the meeting at which the vote was taken provided all persons concerned with the matter are still present, and further provided the motion to reconsider shall be made by a member voting with the majority on the final vote.

2. If all persons concerned with a matter are not present, or if a member so chooses, a motion to reconsider a final vote on any matter may be given not later than the next regular meeting by a member voting with the majority on the final vote, provided notice of intention to move such reconsideration shall have been given at the meeting on which the final vote was taken.

3. A motion for reconsideration shall have precedence over every motion except a motion to adjourn.

## **VI. CHANGES TO BYLAWS**

The provisions of these Bylaws may be altered, amended, or repealed at any time, within limitations imposed by the Brown Act.



**January 28, 2013**  
**Public Workshop #2 for the**  
**Bay Area Integrated Regional Water Management Plan**  
*“Project Selection, Financing and Collaboration”*

You are invited to the second public workshop for the development of the Bay Area Integrated Regional Water Management Plan. The workshop will be held on **Monday, January 28, 2013 from 4-6 p.m.** at StopWaste.org, 1537 Webster Street, Oakland, CA. (12<sup>th</sup> St. BART)

The purpose of the workshop is to provide water, flood and watershed agencies and organizations with information about water-related projects and funding sources related to integrated water resource management projects in the Bay Area.

The topics for the workshop will include:

- **2013 Bay Area IRWMP Projects** – Scoring and Ranking Projects for Inclusion in the Plan – Harry Seraydarian, North Bay Watershed Association and Bay Area IRWMP Project Selection Committee, and
- **Financing and Collaboration** – Opportunities, Challenges, Successes: Current and Emerging Opportunities for Funding Water Resource Projects
  - 1) Water and wastewater public-private partnerships – Grant Schlereth, ARUP
  - 2) Flood management projects – Carol Mahoney, Zone 7 Water Agency
  - 3) Non-governmental organization projects – Caitlin Sweeney, San Francisco Estuary Partnership

The topics will provide ample opportunity for discussion by participants.

The workshop is intended for public agency representatives (particularly water, land use, and sustainable development), policy and planning organizations, environmental and health organizations, community groups, Tribal interests and individuals interested in water supply, water quality, flood protection/stormwater management, wastewater/recycled water, and watershed and habitat protection. For further information, please visit the [website](http://www.bairwmp.org), [www.bairwmp.org](http://www.bairwmp.org).

The Bay Area IRWMP is a multi-stakeholder, nine-county roadmap to coordinate and improve water supply reliability, protect water quality, manage flood protection, maintain public health standards, protect habitat and watershed resources, and enhance the overall health of San Francisco Bay.

P.S. Participation in the Bay Area IRWMP Coordinating Committee is open to anyone interested in regional water projects, programs and policies. Please join us at our monthly meetings, check the website, [www.bairwmp.org](http://www.bairwmp.org), for the contact person in your subregion, or contact us at [BAIRWMP@kearnswest.com](mailto:BAIRWMP@kearnswest.com).



# Bay Area Integrated Regional Water Management Plan

Public Workshop #2

## *“Project Selection, Financing and Collaboration”*

Monday, January 28, 2013, 4:00 – 6:00 p.m.

StopWaste.org, 1537 Webster Street, Oakland, CA

### AGENDA

3:45 – 4:00 p.m.

**Registration**

4:00 – 4:10 p.m.

**Welcome and Introductions**

**Steve Ritchie, San Francisco Public Utilities Commission**

Chair, Bay Area IRWMP Coordinating Committee

4:10 – 4:40 p.m.

**2013 Bay Area IRWMP Projects**

**Harry Seraydarian, North Bay Watershed Association** and Bay Area IRWMP Project Selection Committee

- Scoring and ranking projects for inclusion in the 2013 BAIRWMP
- Project criteria for DWR Grant Applications
- Future, new projects for rounds 2 and 3 of grant funding

4:40 – 5:50 p.m.

**Financing Sources and Collaboration Strategies**

- Funding Sources – Opportunities, Successes, Challenges
  - 1) Public-Private water and wastewater projects – **Grant Schlereth, ARUP**
  - 2) Flood management projects – **Carol Mahoney, Zone 7 Water Agency**
  - 3) Non-governmental organization projects – **Caitlin Sweeney, San Francisco Estuary Partnership**
- Promoting Agency/Non-governmental Collaborations and Addressing Barriers (*Facilitated group discussion of panelists and attendees*)
- Summary

5:50 – 6:00 p.m.

**Wrap-up and Next Steps**

**Steve Ritchie, San Francisco Public Utilities Commission**

Chair, Bay Area IRWMP Coordinating Committee



## **Stakeholder Meeting Agenda**

**December 13, 2012, 1:30 – 4:30 pm, Woodland Senior Center**

**December 18, 2013 1:30 – 4:30 pm, Clearlake City Council Chambers**

1. Introductions and Updates
2. Describe Intent to Prepare Proposition 84 Round 2 Implementation Grant
3. Discuss Proposed Governance for Implementing the Westside IRWM Plan (Handout 1)
  - a. Requirements
  - b. Highlights
  - c. Details
  - d. Discussion/feedback
4. Present Final Draft Goals and Objectives (Handouts 2a and 2b)
  - a. Discuss Prioritization of Objectives
5. Review Revised List of Project Submittals and Prioritize Projects (Handouts 3a – 3f)
6. Request Input and Introduce Plan Sections available for Review (Handout 4)

### Handouts

Handout 1 – Proposed Governance Approach

Handout 2 – Final Draft Goals (2a) and Objectives (2b)

Handout 3a and 3b – Project List Cover Sheet and Map

Handout 3c - Project List Sorted by Submitter

Handout 3d – Project List Sorted by Importance/Urgency

Handout 3e – Project List Sorted by Total Criteria Score

Handout 3f – Project List Sorted by Primary Objective

Handout 4 – Requested Input



## Handout 2a - Final Draft IRWM Plan Goals

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13 and 18 December 2012, Stakeholder Meetings

[Note that plan goals have been arranged alphabetically so as not to imply a priority order.]

1. Acknowledge and respect the cultural values and resources of the region.
2. Improve education and awareness throughout the region about water, watershed functions, and ecosystems and the need for sustainable resource management to protect community health and well-being.
3. Improve the collective understanding of watershed characteristics and functions (natural and human induced) within the region as needed to respond effectively to evolving water resources management challenges and opportunities (e.g., climate change).
4. Improve water-related public health across the region and emphasize improvements for populations most in need.
5. Preserve and enhance water-related recreational opportunities.
6. Preserve, improve, and manage water quality to meet designated beneficial uses for all water bodies within the region.
7. Promote reasonable use of water and watershed resources.
8. Protect and enhance habitat and biological diversity of native and migratory species.
9. Provide reliable water supplies of suitable quality for multiple beneficial uses (e.g., urban, agriculture, environmental, and recreation) within the region.
10. Reduce the risks of disruptive natural and human-caused disturbances affecting the region's water resources including flooding, fire and significant institutional interruptions that reduce resources management services.
11. Support improved regional water management through governance throughout the Region that uses science and collaboration to make fair and equitable decisions and investments.
12. Support sustainable economic activities consistent with local and state government planning efforts within the region.
13. Improve the form and function of degraded natural channels.

12/13/12 and 12/18/12 Stakeholder Meetings

**Summary of Importance/Urgency Priorities for Westside Objectives**

| Summary of Objective  | Importance | Urgency | Cross-Reference to 9/2012 version |
|---|------------|---------|-----------------------------------|
| 1. Provide/promote use of educational curricula for K-12 students                                     | Medium     | Low     | 1                                 |
| 2. Provide educational information to encourage stewardship by public                                 | Medium     | Low     | 1                                 |
| 3. Restore native vegetation/form/function in riparian/aquatic corridors                              | Medium     | Medium  | 2                                 |
| 4. Quantify extent of suitable life-cycle habitat for T/E/I native fish                               | High       | Medium  | 3a                                |
| 5. Prioritize/Plan/schedule improvements of life-cycle habitat for T/E/I native fish                  | High       | Medium  | 3b                                |
| 6. Increase availability of suitable life-cycle habitat for T/E/I native fish                         | High       | Medium  | 3c                                |
| 7. Prevent colonization by Quagga/Zebra mussels and eliminate/prevent spread of New Zealand mud snail | High       | High    | 4                                 |
| 8. Establish invasive plant management plan   | Medium     | Medium  | 5a                                |
| 9. Implement Invasive Plant Management Plan   | Medium     | Medium  | 5b                                |
| 10. Create Asset Management Plan for key water management infrastructure                              | Medium     | Low     | 7, 7a, 7b                         |
| 11. Meet 20% by 2020 Conservation Targets   | Medium     | Medium  | 8                                 |
| 12. Increase adoption of Ag BMPs  | Medium     | Medium  | 9                                 |
| 13. Maintain and increase water-related recreational opportunities                                    | Medium     | Low     | 10                                |
| 14. Provide adequate flood protection   | High       | Medium  | 11                                |
| 15. Manage watershed activities to reduce large erosion events  | Medium     | Medium  | *12 from July 2012 Objectives     |
| 16. Monitor state/federal Delta programs  | Medium     | High    | 13                                |
| 17. Monitor conditions/improve understanding to support sustainable groundwater basins                | High       | Low     | 14                                |
| 18. Maintain and enhance monitoring network and information sharing                                   | High       | Medium  | 15                                |
| 19. Address pollutant sources to meet runoff standards and TMDL targets                               | High       | Medium  | 16                                |
| 20. Minimize accidental wastewater spillage/discharges  | Medium     | Medium  | 19                                |
| 21. Reduce Public health risks by reducing contaminants in drinking water sources                     | Medium     | Medium  | 20                                |
| 22. Meet all drinking water and wastewater discharge standards  | High       | High    | 21                                |
| 23. Provide 100% reliability of M&I water supplies  | High       | Medium  | 22                                |
| 24. Provide agricultural water supplies to support a robust agricultural industry                     | High       | Medium  | 23                                |



## Sharp, Jeff

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**From:** DWR IRWM Grants@DWR [dwr\_irwm@WATER.CA.GOV]  
**Sent:** Thursday, January 17, 2013 2:51 PM  
**To:** DWR\_IRWM\_INFO@LISTSERV.STATE.CA.GOV  
**Subject:** Proposition 84 Implementation R2 Proposal Solicitation - BMS/GRanTS

**Categories:** IRWMP

Dear Interested Party,

DWR has opened the online **Proposition 84 Implementation Round 2 Proposal Solicitation**. Grant applications will be submitted via our electronic submittal tool, Bond Management System (BMS)/Grants Review and Tracking System (GRanTS). Please make note of the following:

- The complete application and all supporting documentation must be submitted via DWR's BMS/GRanTS and hardcopies received by 5:00 p.m. on March 29, 2013.
- The Name of the Proposal in BMS/GRanTS is **Prop 84 Round 2 Implementation PSP**.
- You need to have a valid BMS/GRanTS account in order to submit an electronic application. To set up a BMS/GRanTS account visit the following link to access BMS Public User Guide and the tutorial videos:  
<http://www.water.ca.gov/bms/> (click on the Help Tab).
- To apply for this Grant access BMS/GRanTS at <http://www.water.ca.gov/bms/> and login to your account (using your BMS/GRanTS login password & username). Select "Prop 84 Round 2 Implementation PSP" from the PSPs list.
- BMS supports Internet Explorer Web Browser only (version 7 or higher).
- If you have questions regarding the Proposition 1E Program please contact: Keith Wallace at: [Keith.Wallace@water.ca.gov](mailto:Keith.Wallace@water.ca.gov) or (916)651-9624.
- If you have any questions regarding BMS/GRanTS please contact BMS help desk at: (888) 907-4267 or email [GRanTSadmin@water.ca.gov](mailto:GRanTSadmin@water.ca.gov)



**Department of Water Resources**  
*Division of Integrated Regional Water Management*  
901 P Street  
P.O. Box 942836  
Sacramento, CA 94236-0001  
[DWR\\_IRWM@water.ca.gov](mailto:DWR_IRWM@water.ca.gov)  
**916.651.9613** (office)  
**916.651.9292** (fax)

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San Francisco Bay Regional Water Quality Control Board

**REVISED Notice of Intent to Adopt a  
Mitigated Negative Declaration  
and  
Notice of Hearing on  
Conditional Waiver of Waste Discharge Requirements  
For Discharges from Eligible Vineyard Properties in the  
Napa River and Sonoma Creek Watersheds**

**NOTICE IS HEREBY GIVEN** that the San Francisco Bay Regional Water Quality Control Board (Water Board) is accepting comments on a proposed Conditional Waiver of Waste Discharge Requirements for Eligible Vineyard Properties in the Napa River and Sonoma Creek Watersheds (Conditional Waiver).

The purpose of the Conditional Waiver is to reduce sediment, runoff, and other pollutants in the Napa River and Sonoma Creek watersheds from existing and potential future vineyard properties. It waives requirements for waste discharge requirements provided the vineyard properties comply with the terms of the Conditional Waiver, such as implementing vineyard management practices to comply with water quality requirements.

**Project documents for public review and comment** include a proposed Initial Study/Mitigated Negative Declaration prepared in accordance with the California Environmental Quality Act (CEQA; Public Resources Code §21000 et seq.). The draft Initial Study summarizes the requirements of the Conditional Waiver of WDRs, identifies potential environmental impacts, and describes the mitigation measures, incorporated into the proposed Conditional Waiver, to reduce all potential impacts to a less-than-significant level. The Water Board, acting as the Lead Agency under CEQA, must adopt the Mitigated Negative Declaration before adopting the Conditional Waiver.

The proposed Conditional Waiver of WDRs, ~~and~~ the Initial Study/Mitigated Negative Declaration, ~~and more information~~ are available online at [www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/TMDLs/vineyard/index.shtml](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/vineyard/index.shtml)

Hard copies are available for public review at the Water Board's offices, 1515 Clay Street, Suite 1400, Oakland, CA 94612

**SUBMISSION OF WRITTEN COMMENTS**

**In order to be fully considered, written comments must be received by 5:00 p.m. on ~~Wednesday January 2, 2013~~ Friday, February 1, 2013.** Send comments to the attention of Sandi Potter at the San Francisco Bay Regional Water Quality Control Board to the address listed above, or by fax to (510) 622-2426, or by email at [smpotter@waterboards.ca.gov](mailto:smpotter@waterboards.ca.gov).

**PUBLIC HEARING**

The Water Board will hold a public hearing to consider adopting the Mitigated Negative Declaration and the Conditional Waiver of WDRs.

Time and Date: 9:00 A.M., ~~February 13, 2013~~ March 13, 2013  
Location: Auditorium, Elihu Harris State Building  
1515 Clay Street, Oakland, CA 94612

The hearing will be conducted in accordance with 23 Cal. Code of Regulations §~~649.3648~~ et seq. Time limits may be imposed on oral testimony at the public hearings; groups are encouraged to designate a spokesperson. All exhibits presented and considered by the Board at the hearing, including charts and graphs, ~~and other testimony~~ must be left with the Water Board. They will become part of the administrative record.

A map and directions to the hearing are available online at:

[http://www.waterboards.ca.gov/sanfranciscobay/about\\_us/directions.shtml](http://www.waterboards.ca.gov/sanfranciscobay/about_us/directions.shtml).

The location of the hearing is accessible to persons with disabilities. Individuals who require special accommodations are requested to contact the Water Board's Executive Assistant Mary Tryon, (510) 622-2399, [mtryon@waterboards.ca.gov](mailto:mtryon@waterboards.ca.gov), at least five (5) working days before a meeting. TTY users may contact the California Relay Service at 1-800-735-2929 or voice line at 1-800-735-2922.

Please Contact Sandi Potter at (510) 622-2426, or by e-mail at [smpotter@waterboards.ca.gov](mailto:smpotter@waterboards.ca.gov), if you have any questions on this matter.



A Tradition of Stewardship  
A Commitment to Service

Agenda Date: 12/18/2012

Agenda Placement: 7F

## NAPA COUNTY BOARD OF SUPERVISORS Board Agenda Letter

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**TO:** Board of Supervisors  
**FROM:** Hillary Gitelman - Director  
Planning, Building and Environmental Services  
**REPORT BY:** Hillary Gitelman, Director - 253-4805  
**SUBJECT:** Letter to RWQCB about Vineyard Waiver Program

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### **RECOMMENDATION**

Director of Planning, Building & Environmental Services requests approval of and authorization for the Chairman to sign a letter providing comments on the Regional Water Quality Control Board's proposed vineyard waiver program.

### **EXECUTIVE SUMMARY**

The State Water Board adopted a Total Maximum Daily Load (TMDL) to address sediment in the Napa River on September 9, 2010. Since then, staff of the Regional Water Quality Control Board has been working to define a "waiver program" that will allow vineyard owners to comply with the TMDL requirements without applying for a waste discharge permit. Staff of the Regional Water Quality Control Board is now accepting comments on the draft waiver program, and is scheduled to bring a revised program to their board for consideration and adoption on February 13, 2013.

### **FISCAL IMPACT**

Is there a Fiscal Impact?                      No

### **ENVIRONMENTAL IMPACT**

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

**BACKGROUND AND DISCUSSION**

Section 303(d) of the 1972 federal Clean Water Act requires that states develop a list of water bodies that do not meet water quality standards, establish priority rankings for waters on the list, and develop action plans, called Total Maximum Daily Loads (TMDLs), to improve water quality. The Napa River is on California's 303(d) list of impaired (water quality limited) water bodies for excess nutrients, pathogens, and sedimentation/siltation. As a result, the San Francisco Bay RWQCB developed TMDLs (discharge allocations) for each of these pollutants. The sediment TMDL was adopted by the Water Board on September 9, 2010 and subsequently approved by the EPA on January 21, 2011.

Implementation measures adopted as part of the TMDL require vineyard owners to obtain waste discharge permits prior to October 2014 unless a waiver program is adopted and the vineyard owner complies with that program. Staff of the Regional Water Quality Control Board has been working with local stakeholders on development of a waiver program since April 2011 and are now circulating a draft for public comment.

The attached letter provides staff's suggested comments for the Board's consideration.

**SUPPORTING DOCUMENTS**

- A . Draft Comment Letter
- B . Public Notice
- C . Draft Conditional Waiver of Waste Discharge Requirements
- D . Initial Study/Mitigated Negative Declaration

CEO Recommendation: Approve

Reviewed By: Liz Habkirk



**A Tradition of Stewardship  
A Commitment to Service**

**Board of Supervisors**

1195 Third St.  
Suite 310  
Napa, CA 94559  
[www.countyofnapa.org](http://www.countyofnapa.org)

Main: (707) 253-4421  
Fax: (707) 253-4176

**Keith Caldwell**  
Chairman

December 18, 2012

Sandi Potter  
San Francisco Bay Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

RE: Conditional Waiver of Waste Discharge Requirements Comments

Dear Ms. Potter,

Thank you for the opportunity to comment on the Draft Conditional Waiver of Waste Discharge for Vineyard Properties in Napa County and related Mitigated Negative Declaration. The County appreciates the Water Board's efforts to develop a strategy for reducing excessive sediment runoff and other pollutant discharges into the Napa River. The Waiver will supplement the County's existing regulatory requirements and policies related to new and replanted vineyards as well as numerous conservation and stewardship efforts carried out on the part of non-governmental entities and private landowners that address the objectives and goals outlined in the Napa River Sediment Reduction and Habitat Enhancement Plan (TMDL).

Napa County and its agricultural community have long been at the forefront of implementing resource conservation practices that have reduced sediment inputs to streams and improved water quality in the Napa River watershed. In 1991, the County enacted the Conservation Regulations, which require engineered erosion control plans for new and replanted hillside vineyards and preclude development near streams. In 2008, the County updated its General Plan and adopted policies to avoid increases in peak runoff and soil loss from new hillside vineyards, and provided for increased attention to wetlands, oak woodlands, and other sensitive resources.

Today, there are approximately 44,000 acres of vineyard in the Napa River Watershed and approximately 17,000 acres are on hillsides. A significant portion of these hillside vineyards have been developed with the guidance of engineered erosion control plans, and/or are applying current effective sediment reduction and water quality related best management

**Brad Wagenknecht**  
District 1

**Mark Luce**  
District 2

**Diane Dillon**  
District 3

**Bill Dodd**  
District 4

**Keith Caldwell**  
District 5

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practices. This long-standing and locally administered program is well recognized and has become the culture of our nationally awarded agricultural industry.

The County, local agencies, non-governmental organizations and private landowners have and will undertake numerous conservation efforts in the Napa River watershed that address the goals and specific actions prescribed in the TMDL. In particular, significant commitment on the part of local government and private landowners has been demonstrated to be successful in conducting major in-channel mainstem erosion control and habitat enhancement projects along many miles of the Napa River (e.g., Rutherford Dust Restoration project, Napa River Flood project, Napa Creek Flood project, St. Helena Flood project, as well as others). These projects have served as models from which similar environmental stewardship and restoration efforts across the nation have followed.

Currently plans are underway to restore an additional 9-mile section of the Napa River, extending from Oakville Cross Road to Oak Knoll Avenue. Directly addressing specific TMDL actions to reduce fish passage impediments in the river system, local agencies continue to work together to remove fish migration barriers. A recent example of this pro-active approach is the renovation of the County's historic Zinfandel Lane Bridge. That project alone significantly improved the migration passage of chinook and steelhead to over 60 miles of suitable upstream habitat in the upper reaches of the watershed.

These projects, coupled with the County's conservation policies, are among many past and ongoing conservation efforts that are improving the overall water quality and habitat value of the Napa River and its tributaries. Targeted out-migration fisheries monitoring over the past four years has provided empirical evidence of a vibrant native fishery within watershed. It appears the river system is supporting a stable and healthy population of steelhead and a relatively small and fluctuating population of Chinook (Napa County RCD 2012 Steelhead and Salmon Monitoring Report), indicating that fisheries habitat conditions within the watershed are improving. The County believes that this and other types of resource monitoring are very important to track the effectiveness of TMDL implementation actions and other conservation efforts. We hope the Water Board will continue to support the County in its efforts to undertake and account for actions that improve water quality, enhance the health of the native fish community, and improve the aesthetic and recreational values of the river and its tributaries.

We believe the Waiver program will be most effective if it acknowledges and builds from the successful conservation policies and stewardship efforts already in place, limits requirements on replanted and valley floor vineyards, and allows hillside vineyard owners sufficient flexibility to meet new requirements in a variety of ways that are suited to site-specific characteristics and challenges. If crafted appropriately, the Waiver will provide clear direction and delineate appropriate responsibilities among and between the landowner and Water Board staff. The Waiver should not overly burden responsible landowners who demonstrate progress towards meeting the TMDL. Rather, the Waiver would be most effective if it focused its

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requirements on the improvement of existing problematic roads on private lands, which are listed as the greatest sources of sediment in the TMDL. County programs to address private roads are limited unless the roads are accessory to vineyard development, and we believe the Road Management Element of the Waiver program will have the greatest quantitative benefit on sediment loading reduction in the watershed. We encourage the Water Board to ensure adequate State and local resources are made available to realize the goals and requirements of that element.

Please don't hesitate to contact myself or Brian Bordona on our staff if you have any questions about these comments.

Regards,

Keith Caldwell, Chairman  
Napa County Board of Supervisors

cc: Nancy Watt, County CEO  
Minh Tran, County Counsel  
Hillary Gitelman/Brian Bordona



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**Napa River Watershed Profile:  
Past and Present Characteristics with  
Implications for Future Management  
of the Changing Napa River Valley**

⋮

by  
Meredith Williams  
Josh Collins  
Sarah Pearce  
Robin Grossinger  
Michelle Lent  
John Oram  
Jonathan Koehler  
and Rainer Hoenicke

Design  
Joanne Cabling  
Linda Wancyzk

## Overview

Ecological health and economic health are intimately interconnected in the Napa River Watershed. Napa Valley is the most recognized area within the best-known wine growing region in the United States. It yields wines that are enjoyed around the world. The community trades on the beauty and healthy life style that is emblematic of Napa Valley. The good health of the river ecosystem is essential to maintain this valuable reputation. The fish and wildlife that are endemic to the river ecosystem are primary aspects of its health. The habitat conditions for salmon and steelhead are especially important because they indicate not only the health of the river in the valley but also the health of its connection to tributaries and to San Francisco Bay.

Natural rivers adjust in width, depth, plan form, and slope to changes in sediment and water inputs. If the inputs are consistent enough in the long term, the ongoing natural processes of erosion and deposition within the river will stabilize its form. The stable form of a natural river usually includes pools and riffles, active bars and floodplains, meanders and straight reaches, and other elements that are predictably distributed along the river course. Seasonal and annual variability around the long term average inputs of water and sediment contribute to variations in river form that in turn increase the diversity of habitats for native plants and animals. Under natural conditions, rivers that are not confined by hillsides or canyon walls tend to migrate laterally. Napa Valley was formed over many thousands of years by the back-and-forth migration of the river.

The health of the Napa River ecosystem has significantly declined due to unnatural imbalances between inputs of water and sediment. In the Napa River watershed, a series of major land use changes beginning with Euro-American settlement increased the inputs of water relative to the inputs of coarse sediment, causing the river to erode its bed, abandon its floodplains, and become laden with fine sediment. Some reaches were artificially straightened and others were armored or revetted to prevent erosion of their banks. As a result of these land uses, the river system has become greatly simplified in physical form and unable to support healthy

communities of aquatic and riparian plants and animals, including salmon and steelhead (Napolitano et al., 2009).

The Napa River is listed as impaired under Section 303(d) of the US Clean Water Act due to pathogens (RWQCB 2008), nutrients (RWQCB 2003), and excessive sedimentation (RWQCB 2007). The sediment problem is arguably most important because it significantly impacts the overall form and ecological complexity of the river ecosystem (Stillwater Sciences and W.E. Dietrich 2002), and because its solution is likely to involve adjustments in land and water management throughout the watershed (Pacific Watershed Associates 2003a,b,c; RWQCB 2007). A broad diagnosis of river health is warranted to outline possible solutions to the systemic imbalance between inputs of water and sediment that portends chronic river erosion and habitat loss.

This report recognizes that improvements in the health of the river ecosystem must also assure adequate flood control and water supplies. Studies of domestic and agricultural demands for water have recently been conducted (NCFWCD 2005, 2050 Napa Valley Water Resources Study). Almost none of the water used by agriculture in the Napa River Watershed is imported. Agriculture depends on precipitation that generates runoff and recharges groundwater aquifers within the watershed. Water shortages may become more widespread for agriculture outside of the groundwater-deficient areas due to its heavy reliance of the indigenous water supplies (2050 Napa Valley Water Resources Study). Agricultural growth, in combination with climate change, is likely to strain water supply further (Cooley et al., 2009, Lee et al., 2009, Lobell and Field 2009). Studies of flooding in Napa Valley and how to control it have also been conducted. A naturalistic approach to flood control is being implemented in parts of the river system and is likely to improve its health <http://www.countyofnapa.org/pages/departementcontent.aspx?id=4294971816>.

This report builds on these studies with a broad recommendation for the agricultural community to decrease water consumption through conservative irrigation and frost control practices, water re-use, conjunctive water use, and a variety of ways of increasing the overall

retention of water within the watershed. In essence, drainage to the river needs to be slowed and more evenly distributed through the seasons. This will require more water storage and cooperative management of innovative storage and drainage systems. Supplies of coarse sediment may have to be added and the river given room to widen for its health to be most fully restored. Some reaches of the river will be better suited for restoration than others. Every effort to improve the ecological health of the river must be planned in the context of the hydrological and ecological functions of the watershed as a whole.

Monitoring is essential to track the progress of efforts to improve river health, to assess the threats against progress, and to know when the desired improvements have been achieved. A program to monitor local salmon and steelhead populations has been initiated (Koehler 2008) and should be continued. Efforts to expand and coordinate groundwater monitoring have been explored (Center for Collaborative Policy 2010), and the resulting recommendations will need to be implemented. The existing efforts to monitor flows in the river will need to be expanded and augmented with a program to assess changes in river form and structure, with a focus on aquatic and riparian habitat conditions. To the extent appropriate, the monitoring data should be made available to the public through online information systems, such as the Watershed Information Center & Conservancy (WICC) for Napa County.

The historical form and structure of the Napa River ecosystem cannot be completely restored. There is no way to reach the past. But as is, the river ecosystem has large potential to provide higher levels of primary ecological services that are compatible with all other watershed management objectives. Realizing most of this potential will require setting realistic goals for water management that integrate across flood control, water quality improvement, and consumptive demands for each major tributary and for the watershed as a whole, then designing and implementing new watershed management policies and systems to achieve the goals. Without a doubt, all efforts to manage the sediment-water problems in the watershed need to be planned together in the context of an overall vision of watershed health

that is shared among all the stakeholders. Restoring the health of the river ecosystem will require an explicit vision of success.

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**Report Objectives**

The San Francisco Estuary Institute (SFEI), in partnership with the Napa County Resource Conservation District (Napa RCD) and the Napa County Farm Bureau, was funded through a California State Proposition 40 grant from the State Water Resources Control Board (SWRCB or State Water Board) to present a watershed-based framework for addressing agricultural challenges related to improving the health of the Napa River ecosystem. In particular, the project sought to identify possible adaptive management measures whose implementation could allow the State Water Board to declare the Napa River unimpaired under section 303(d) of the US Clean Water Act. The project objectives can be summarized as follows.

- Compare and contrast the historical and current aquatic and riparian habitats of the Napa River ecosystem, with a focus on the Napa River in its valley, since it has been identified as impaired, is the centerpiece of the local aesthetic, and its condition is symptomatic of the overall health of its watershed.
- Identify how land use changes have contributed to current undesirable conditions in the river ecosystem.
- Describe relationships between agricultural practices and the major attributes of a highly functioning, healthy river ecosystem.
- Identify management approaches or practices that could help improve the health of the river ecosystem.
- Increase understanding within the agricultural community about the relationships between past and present agricultural practices and river health.

## Approach

Our approach was designed to help land owners and managers understand how climate, geology, and land use influence inputs of water and sediment to the river, and how imbalances between these inputs reduce the ability of the river ecosystem to provide the full range of its desired functions, including groundwater recharge, irrigation, delivery of beneficial sediments and nutrients to the valley and San Francisco Bay, and the support of native aquatic and riparian plants and animals. We sought to elucidate how the sediment-water problem evolved and how it might be solved through coordinated adjustments in land and water management. We expected that the corrective actions might differ from place to place based on land use constraints and based on the natural relationships between water and sediment inputs and their locations within the watershed. The diagnostic framework called for comparing pre-settlement and existing conditions of the river as a physical system in terms of ten well-established attributes of a healthy river (after Trush et al., 2000):

1. the sequence of alternating river bars is intact as the primary geomorphic and ecological unit of the river ecosystem;
2. each component of the annual hydrograph provides specific, expected geomorphic and ecological functions;
3. the surface layer of sediment on the channel bed is frequently mobilized;
4. the alternating river bars are periodically scoured deeper than their coarse surface layers;
5. the inputs of fine and coarse sediments are balanced with the inputs of water;
6. the river channel is free to migrate laterally;
7. floodplains that are frequently flooded adjoin most of the river channel;

8. the river channel and its floodplains are complex in form and structure due to infrequent large floods;
9. the annual hydrograph sustains diverse riparian plant communities; and
10. groundwater in the valley is naturally connected to the river channel.

Not all attributes are present in every reach of a healthy river, but the existence of these attributes for the system as a whole indicates its overall integrity and good health. In this context, good health is assumed to be the capacity of a watershed to provide high levels of the beneficial uses as defined by the San Francisco Bay Regional Water Quality Control Board (RWQCB). Our assessment is that the ten attributes listed above support these uses. This approach enabled us to assess the relative contributions of nature and people to the current condition of the river ecosystem, and to explicitly link watershed science to watershed management for the purpose of adjusting inputs of water and sediment to realize, to the extent feasible, the healthy river attributes.

In the modern world, rivers provide many social services that are not necessarily compatible with all ten of these attributes. For example, there are usually necessary tradeoffs between the natural benefits of flooding and the need for flood control. However, consideration of the healthy river attributes can help guide an analysis of large-scale human impacts and future management options.

In general, the overall diversity and levels of functions and services of an ecosystem increase with its physical complexity (Holling et al., 1995, Jørgensen and Müller 2000). The more complex an ecosystem is, the more ways it has to process material and energy, and the more it can resist or rebound from stress and disturbance. Ecosystem resiliency is especially important in the face of the disturbances that are likely to result from local climate change. River systems that have the ten attributes listed above tend to be very complex, and therefore tend to have many functions and services, both physical (e.g., pollution filtration,

groundwater recharge, flood stage desynchronization) and ecological (e.g., support of native riparian and aquatic species and communities). They also tend to be resilient to natural and unnatural disturbance.

There is abundant local interest in recovering sustainable populations of salmon and steelhead (salmonids). The health of salmonid populations is strongly correlated to the healthy river attributes. For example, diverse riparian vegetation that provides shade and large woody debris is imperative for maintaining suitable habitat for salmonid spawning, egg incubation, and rearing. The functional relationship between healthy salmonid populations and healthy river attributes is so strong that throughout the Northwest, the health status of salmonid populations is used to assess that status of river health. This is part of the rationale for the intense local focus on salmonid recovery, in addition to the State and Federal mandates to that effect. The healthy river attributes serve as a framework to analyze relationships between the physical form and structure of a river ecosystem and its desirable functions.

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**Historical Conditions**

The historical Napa River Watershed was not wilderness. Indigenous people inhabited the watershed for thousands of years and expertly managed selected ecological processes to achieve desired outcomes. Their management was persistent and not inconsequential, but did not fully interrupt or eliminate natural processes. Fire was used to adjust plant communities, but there is little evidence that the overall species composition of the plant communities or the perviousness of the land or its ability to retain water were altered. There is no evidence of prehistoric artificial irrigation or extensive agriculture. Except when noted, the historical conditions largely represent natural processes. Our detailed reconstruction of the historical form and structure of the river ecosystem suggests that it abundantly expressed all ten attributes of good river health, except for river migration (Grossinger 2012). There is no evidence of extensive channel movements at the time of Euro-American settlement. The analysis of historical conditions helped to validate the healthy river attributes as a diagnostic framework.

The Napa River watershed was not unlike many other watersheds in the Central Coast Range. Variable geology, topography, rainfall patterns, plus a connection to ocean waters created a complex mosaic of aquatic habitats. There were no natural deepwater lakes and few ponds, but ephemeral and perennial streams connected the steeper reaches of the watershed to a verdant valley. Broad tidal marshes bordered the estuarine reaches of the river, where seasonal mixtures of ocean and river water created variable salinity gradients. The complex habitat mosaic supported diverse communities of plants, fish, and other wildlife.

The area commonly called Napa Valley consists of distinct geomorphic elements termed alluvial fans, river terraces, and floodplains. The fans were created by the major tributaries as they deposited sediment along the valley margins. The western fans are larger than the eastern fans, indicating that the western tributaries have tended to yield more sediment. This stems from differences in lithology and precipitation on the different sides of the watershed. With some exceptions, the western side is wetter and consists of more friable sedimentary geology prone to landslides. The eastern side largely consists of volcanic geology that is less friable. Terraces are abandoned river floodplains that are never or rarely flooded. Floodplains are flat areas of the valley that flood. Lower lying floodplains are flooded more frequently. The historical floodplains widened upstream and downstream of the large alluvial fans created by the major tributaries. The floodplains were narrowest where the valley is pinched between large opposing fans. Early settlements were built upon the larger fans, safely above major floods.

Aside from overland flow during major storms, some tributaries did not reach the river. Rather, they recharged local aquifers through their fans. Aquifers were high all year and emerged onto the valley floor during the wet season, at the base of fans and elsewhere, creating abundant wetlands. Some of the broader areas of the valley had a variety of side channels that carried flood flows. Much of the valley immediately bordering the river served as its active, low-lying floodplain that accommodated storm flows and trapped fine sediment. Riparian forests covered natural levees and

low terraces along the river, shading it and supplying it with woody debris. In general, prior to Euro-American settlement, the watershed had great capacity to intercept and store rainwater and floodwaters in aquifers and wetlands. The high aquifers slowly drained to the river throughout the summer. As a result, the peak river flows during major storms were lower than they are today, and the summer base flows were cooler, more persistent, and more extensive.

Although the river was free to migrate, there is no historical evidence of rapid alterations in the river course, suggesting that inputs and outputs of sediment and water were more or less balanced for the system as a whole, and that the abundant floodplains and wetlands mitigated the effects of major floods on river form, structure, and location. Little is known about the actual nature of the historical river bed in the valley. There are no comprehensive historical descriptions of it, and it has been eroded away.

The coarseness of the river bed matters greatly to salmonids. Their successful spawning requires cool flows of well-aerated water through moderately coarse sediment that is relatively free of silts and clays. It seems likely that most of the historical inputs of coarse sediment originated in a few major tributaries, and that the coarseness of the bed decreased with distance downstream from these sediment sources.

These general descriptions of the historical presence and natural variability in the healthy river attributes are supported by reach-specific case studies. The current status of the attributes is explored in depth in this report.

## Modern Conditions

The river in today's valley might appear natural, but it is actually a skeletal remnant of the much more complex historical river ecosystem. There are some exceptional areas with appreciable complexity, but overall the channel is greatly simplified. The healthy river attributes are absent or weakly evident in most reaches.

The simplified river system is a result of more than two centuries of intensifying and changing land uses. In essence, ranchers, farmers, loggers, dam builders, grape-growers, and urban developers altered the surface and sub-surface water storage and drainage systems to increase their reliability and efficiency. These changes were purposeful, popular, and supported by public policy. Their impacts upon the river ecosystem were seldom anticipated and only recently have they become a serious concern to responsible agencies and the public. Nevertheless, the changes and their negative impacts have been substantial. Not counting any sub-surface drains, about 450 kilometers (km) or 280 miles (mi) of surface channels currently drain the valley. Almost half of the channels have been artificially constructed to drain seasonally flooded areas and extend formerly discontinuous tributaries down their alluvial fans, through low-lying areas of the valley, and directly into the river. The total length of the surface drainage network in the valley has increased by almost 25%. Ditches comprise more than 10% of the entire drainage network for the watershed. As a result of both surface and sub-surface modifications of the natural hydrology, the drainage density (the ratio between the length and area of the drainage network), even in this relatively rural watershed, may now be comparable to more urbanized watersheds. It is primarily the increased drainage density that has contributed most to the considerable degradation of healthy river attributes described above.

People living and working in Napa Valley rely extensively on reservoirs to meet their water needs. Hennessey, Rector, Bell, Kimball, and Milliken Reservoirs supply municipal water. But these are only a few among the hundreds of smaller reservoirs that intercept runoff and sediment from about 30% of the watershed. Almost all of these impoundments are less than 2 hectares (ha) or 5 acres (ac) in area, and were designed as stock ponds or storage components of local irrigation systems. They tend to fill and spill each wet season. Both large and small reservoirs trap large amounts of sediment and contribute to the deficit of coarse sediment in the river. The type and amount of sediment trapped is dependent on geology, slope, upstream drainage area, and upstream drainage density, as well as reservoir size. For example,

the Sonoma volcanics yield large amounts of coarse sediment that are trapped by Kimball Reservoir. In addition to these on-stream reservoirs, many impoundments, mostly located on the valley floor, are fed by groundwater or subsurface drainage and primarily serve dry-season irrigation needs and frost control purposes. The more than 1,200 on- and off-stream reservoirs probably equal or exceed evaporative losses of water compared to the wetlands, ponds, and oxbow lakes that were present historically. These evaporative losses from reservoirs can contribute to downstream water shortages.

No one knows the full extent of sub-surface drains. Most hillside vineyards have been fitted with drains that shunt runoff into fill-and-spill reservoirs or directly into tributary channels. Much of the valley has been fitted with sub-surface drains to dewater the root zone of vineyards in early spring. During winter, water is pumped from some of these drains into reservoirs built on the valley floor to be used later for irrigation and frost control. After the reservoirs are filled, groundwater flows through the sub-surface drains and surface ditches to the river. This accelerates drawdown of the groundwater near the river and contributes to the lack of cool summertime base flows, which in turn reduces the quality of the river as habitat for salmonids and other aquatic wildlife.

While much has been done in recent decades to reduce surface erosion and soil loss in the watershed, little has been done to reduce runoff. The volumes and rates of runoff that reach the river have been increasing ever since Euro-American settlement.

The modern hydrograph rises and falls more quickly and has a much higher peak than the historical hydrograph. This is due to the increased volumes and rates of runoff plus the accelerated groundwater discharge. The decrease in coarse sediment inputs, increase in flows, and channel simplification have occurred together, such that the river has had more energy than needed to carry and deposit sediment. The river has therefore been eroding its bed. Without inputs of sediment to balance the outputs, the bed has been lowered relative to the valley floor. As a result, the river has been gaining capacity to contain larger flows between its banks. As the depth of flows has increased, their power to erode the river

bed has also increased. The positive feedback between the depth of peak flows and channel incision has caused the river to continue to incise, except where it has encountered bedrock or other resistant natural material, or where the bed has been dammed or artificially armored. Incision has been arrested in a few reaches by the collapse of the river banks, which widens the channel, broadens the flows, and lessens their erosive power. This is the natural way that channels stabilize following episodes of incision.

The rate of channel incision has waxed and waned depending on changes in water and sediment inputs, as affected by climate and land use. The effects of short term variations in climate, such as the various droughts of the last century, are masked by the greater effects of land use change. Since Euro-American colonization, net incision has been at least 2-3 meters (m) or 6 – 9 feet (ft) for much of the river in the valley, with greater and lesser rates locally evident. Incision has been so severe that most of the river in the valley is entrenched, meaning that most flows that historically would have inundated the floodplain no longer overtop the river banks.

The river in the valley probably receives much larger loads of fine sediment now than it did historically. Despite the implementation of erosion control measures on agricultural lands, there are inputs of fine sediment from hundreds of miles of dirt roads and roadside ditches. There is also greater erosion of the river bed and banks that are replete with fine sediment. Since chronic incision has caused the river to abandon its historical floodplains, there is much less area along the river to trap and store fine sediment. Valley wetlands, now ditched, also no longer trap fine sediment.

Starting in the mid-nineteenth century, artificial levees, channel incision, the obliteration of side channels, and land use encroachment into the historical riparian zone have created a relatively straight, entrenched, homogenous, single-thread channel with a narrow riparian corridor throughout most of the valley. Broad floodplains are almost nonexistent. The existing riparian forest is not structurally complex.

The tendency of the river to scour frequently, plus a lack of large woody debris, causes the river bed to be rather planar in many reaches, with long pools of unnaturally uniform depth.

## Management Alternatives

Opportunities exist to restore the overall ecological health of the river ecosystem. Based on the findings of our work we propose that the following actions warrant consideration. These actions are possible but complex. They could impact many stakeholders and would involve the oversight of multiple governance agencies. Their feasibility and suitability vary among the river reaches. Selected appropriate actions would ideally be implemented in a coordinated way to ensure their useful synergies and maximize their cumulative benefits. The following list of possible actions belies the technical and political challenges that they would entail. We emphasize that the actions need not be implemented everywhere, but instead be considered for the most suitable reaches of the river.

- Release water from major reservoirs during the dry season to augment base flows as needed to improve salmonid rearing habitat and other aquatic and riparian resources.
- Release water from reservoirs or from subsurface drains during late spring to flush fine sediments as required to improve salmonid spawning habitat later in the year.
- Release water from reservoirs during springtime high flows to promote rejuvenation of river bars and to discourage their colonization by woody vegetation.
- Augment inputs of coarse sediment to improve salmonid spawning habitat. In this regard, consider dredging coarse sediment from major reservoirs, which would also increase their capacity to store water.
- Restrict bank revetment to allow the river to gradually widen and develop active floodplains.
- Construct multiple floodplains at different elevations to restore fine sediment entrapment processes, off channel salmonid habitat, and riparian functions. The uppermost plains might also be used for agriculture.
- Construct reservoirs with injection wells at the tops of alluvial fans to increase arable lands and groundwater resources, while eliminating ditches that cause excessive runoff by artificially connecting tributaries to the river.
- Remove selected dams on tributaries to release stored coarse sediment and reduce evaporative water losses.
- Remove fish barriers along tributaries.
- Redesign ditches and replace culverts and other engineered crossings to increase the inputs of coarse sediment and its transport while reducing inputs of fine sediment.
- Restore beaver population for building low dams that trap fine sediment, to restore riparian communities, and to increase overall river ecosystem complexity.
- Reduce agricultural water demands by promoting drought-resistant grape rootstock and by implementing conservative irrigation and frost control practices.
- Dedicate selected low-lying areas of historical wetlands for conjunctive use as aquatic habitat and surface water treatment and storage.



- Adopt additional urban water management strategies, beyond those already in place, that incentivize urban infill, and encourage Low Impact Development (LID) to reduce runoff.
- Add storage capacity on the valley floor as part of a coordinated system of conjunctive use of sub-drains and reservoirs to facilitate the careful targeted management of river flows as recommended above. This might be achieved via net reduction of current cumulative reservoir surface area and increase in arable acreage.
- Consider including wetlands and off-channel aquatic habitats as design elements of valley reservoirs.

Many of the individual actions identified above can be combined into synergistic management scenarios to increase the health of river reaches and selected sub-watersheds. This will require more coordination among the water users than exists now. An irrigation district or other form of self-governance may be needed at the watershed scale to achieve the coordination necessary to improve overall river ecosystem health while providing adequate flood control and water supplies in the context of climate change. It may be helpful to develop map-based illustrations of alternative locations for habitat restoration projects and management actions that can be implemented to achieve various river health objectives.

All evidence to date indicates that water supplies are adequate to improve river health and sustain a vital agricultural community, if the community is willing to explore, develop, and adopt some of the actions outlined here. Detailed studies of the feasibility of these actions still will be needed. The feasibility studies should begin with a realistic water budget for each major tributary and for the Napa River Watershed as a whole. Realistic water budgets are essential for understanding how different actions or sets of actions are likely to affect downstream flows and sediment regimes. The studies should continue with numerical modeling of the

relationships between flow and the attributes of river health. These relationships will vary among reaches. The water budget can then be used to help identify which actions are most likely to significantly improve the health of the river ecosystem while meeting goals for flood control and secure water supplies. Direct measures of flow and river conditions can, in turn, serve to calibrate the models and to assess the performance of management actions.

Proposed changes in public policy support the watershed approach to aquatic resource restoration and protection. The revised guidelines for aquatic habitat mitigation under Section 404 of the US Clean Water Act (<http://www.epa.gov/wetlandsmitigation>), the proposed California Wetlands and Riparian Area Protection Policy ([http://www.swrcb.ca.gov/water\\_issues/programs/cwa401/wrapp.shtml](http://www.swrcb.ca.gov/water_issues/programs/cwa401/wrapp.shtml)), and the proposed Stream and Wetland Systems Protection Policy of the Bay Area Water Board ([http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/streamandwetlands.shtml](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/streamandwetlands.shtml)) all emphasize a watershed approach to planning local management actions.

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**Monitoring**

Important but limited monitoring of the Napa River ecosystem is ongoing. The Napa Creek Salmon Monitoring Project, initiated by the Napa Resource Conservation District (RCD) in 2006, can provide essential information about the effects of management actions on salmonid conservation. But, there is little information about many of the attributes of overall river ecosystem health. The monitoring plan for the Rutherford Dust Society's Rutherford Reach Restoration Project will generate a comprehensive dataset for channel conditions in this reach. It is unlikely, however, to shed light on the response of the restoration reach to upstream actions, or on the effects of the restoration on downstream conditions, since these areas are not being comparably monitored. Napa County is currently supporting an effort to coordinate the monitoring approaches among large restoration projects on the Napa River so that datasets can be shared, compared, and expanded throughout the watershed. Such coordinated and

standardized monitoring is essential to compare one project to another, track each project over time, and to assess their cumulative effects on one or more of the ten attributes of river health described above.

All monitoring should be driven by clear and thoroughly vetted management questions and goals. For the Napa watershed, the monitoring program will need to answer questions about the success or performance of restoration, mitigation, and Best Management Practices (BMP), as well as track progress toward the goals for Total Maximum Daily Loads (TMDL), Low Impact Development (LID), wastewater reuse, salmonid recovery, flood control, etc. To meet these needs, a monitoring program will have to include both ambient monitoring and project-specific or targeted monitoring.

Ambient monitoring should have four basic elements: a comprehensive base map of aquatic and riparian habitats and related infrastructure, periodic comprehensive measurement of land use and land cover, continuous fixed-station monitoring of rainfall and in-channel flow, and probabilistic surveys of field conditions. A base map is a map of all channels, wetlands, lakes and other surface waters and their associated riparian areas that together comprise the places and pathways of water and sediment transport and storage within the watershed. The base map is as detailed and accurate as necessary to support numerical modeling of hydrological and ecological processes for informing local land management. Furthermore, the base map serves as the spatial framework for probabilistic sampling of ambient conditions of habitats and wildlife support.

Targeted monitoring is site-specific and has two components: projects and reference sites. Projects might include any efforts on the ground that alter the physical form or structure of the river ecosystem, including the channel, floodplains, and riparian areas, or that affect a change in water and sediment inputs to the ecosystem. The concept of targeted monitoring also pertains to sites that are not part of any project but must be repeatedly monitored to address a particular management concern. For example, some of the reaches that salmonids favor for spawning need to be regularly monitored to assess spawning success.

To the extent possible, the targeted monitoring should include the same methods that are used in the ambient monitoring. This is the only way to compare one project to another, to track change from an individual project over time, assess how projects perform relative to ambient condition, and re-evaluate management approaches that do not appear to yield the desired benefits. The response of the river ecosystem to climate change or to large-scale management actions may take place over decadal or longer periods. This increases the need to standardize methods for projects and ambient surveys that represent different timeframes.

A major component of successful monitoring is public access to monitoring results. Napa County's Watershed Information Center & Conservancy (WICC; [www.napawatersheds.org](http://www.napawatersheds.org)) might serve as a local portal for the needed database. At the state level, the California Wetland Portal ([www.californiawetlands.net](http://www.californiawetlands.net)) and proposed Watershed Portal should be explored as public domain systems for managing and sharing monitoring data and information. These portals use interactive, standardized base maps as called for above to enable the public to visualize and access information about aquatic and riparian resources and related projects.

As monitoring moves forward and data accumulate, they could be interpreted in terms of the ten attributes of a healthy river ecosystem (Trush et al., 2000) used to frame this study. The monitoring data could thus be used to assess the efficacy of watershed management in terms of the overall health status of the Napa River ecosystem. The monitoring program should consider the following specific recommendations.

- Once developed, the base map should serve to locate and track projects and environmental conditions. It will need to be updated periodically.
- Land use can be monitored by maintaining standardized maps of land cover types, and by annotating the maps with information about land use practices. These might include irrigation and other water management practices, erosion control practices, etc.

- The storm hydrograph and annual hydrograph of the river can be regarded as performance curves for assessing the effects of upstream land use on aquatic resources. This means the hydrographs will need to be monitored above and below projects expected or designed to modify river flows. To assess the cumulative effects of projects, the hydrographs might have to be monitored above and below tributaries.
- To understand management effectiveness, the relative cumulative effects of management actions and climate on the hydrographs and sediment regime will need to be assessed. This will require adding enough rain gauges to characterize rainfall for individual major tributaries.
- With regard to sediment, the main objectives for the Napa River ecosystem are to eliminate excessive scour and incision of the riverbed, and to increase the coarseness of the bed for selected reaches. Tracking progress toward these objectives will require a standardized set of field methods to assess conditions of the river bed as the net results of changes in sediment inputs and sediment transport by the river.
- Rapid assessment methods (RAMs) can yield cost-effective, field-based assessments of overall health that cannot be provided by more intensive, narrowly focused monitoring methods. RAMs typically involve standardized indicators of visible condition to answer a set list of questions relating to the ability of a site to provide a broad range of ecological functions or services. Many rapid assessment methods have been developed for streams and riparian corridors (NRCS 2001). In California, the two most often used RAMs are Proper Functioning Condition (PFC) ([http://el.erdc.usace.army.mil/emrrp/emris/emrhelp6/process\\_for\\_assessing\\_proper\\_functioning\\_condition\\_tools.htm](http://el.erdc.usace.army.mil/emrrp/emris/emrhelp6/process_for_assessing_proper_functioning_condition_tools.htm)) and the

California Rapid Assessment Method (CRAM) ([www.cramwetlands.org](http://www.cramwetlands.org)). RAMs could easily be integrated into a monitoring program.

- Additional methods can be added to a program as needed to address particular management concerns or answer specific management questions. For example, as mentioned above, concerns about the river bed as spawning habitat for salmon and steelhead might warrant monitoring bed permeability where spawning is likely. Concerns about aquatic pathogens might warrant including standardized measures of them along with other routine water quality monitoring.
- Ambient surveys can also be conducted to assess changes in the distribution and abundance of selected habitats by re-mapping selected "status and trends" plots. This is the approach being used by the USEPA and other federal agencies to track net change in wetland acreages nationwide (<http://www.epa.gov/owow/wetlands/survey/>), and is being recommended as part of the California Wetland and Riparian Area Monitoring Program.

The State Water Resources Control Board (SWRCB) is working with United States Environmental Protection Agency (USEPA) to develop State policy for planning and monitoring restoration and mitigation actions in the context of ambient watershed condition ([www.swrcb.ca.gov/water\\_issues/programs/cwa401/wrapp.shtml](http://www.swrcb.ca.gov/water_issues/programs/cwa401/wrapp.shtml)). The policy lays the foundation for developing and implementing standardized water quality monitoring methods as called for by the California Water Quality Monitoring Council ([http://www.waterboards.ca.gov/mywaterquality/monitoring\\_council/index.shtml](http://www.waterboards.ca.gov/mywaterquality/monitoring_council/index.shtml)). While project-specific monitoring will continue to be an integral part of the regulatory process, new emphasis will be placed on understanding monitoring results in the context of ambient condition at the watershed scale.

## 2013 calendar colorful, informative

DECEMBER 28, 2012 2:02 PM • [DENISE SEGHEISIO LEVINE](#)

If you still need a paper calendar for 2013 and you cherish the many oak trees that beautify Napa Valley, have I got a deal for you.

The Napa County Resource Conservation District, the Watershed Information Center and Conservancy of Napa County, and Friends of the Napa River have produced a beautiful, educational 2013 Watershed Awareness Calendar: "Preserving and Restoring the Oaks of Napa County." This colorful guide gives an overview of the history of oaks, where to find them, their impact on cultures, what other species they support, what threatens oaks and what we can do to protect them. It is instructive, lovely and free.

Some of our most talented local photographers have captured images of oaks, their habitats, their leaves and their acorns throughout the changing seasons.

The first page introduces you to the common oaks of Napa County, with clear photos of distinguishing leaves and acorns and descriptions of where each type grows. Armed with this calendar, you will be able to identify the valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), blue oak (*Quercus douglassii*), interior live oak (*Quercus wislizeni*), canyon live oak (*Quercus chrysolepis*) and black oak (*Quercus kelloggii*).

The calendar's authors describe the state of our oak woodlands and why becoming more aware of our oaks is so important.

January's page starts with the Angwin Audubon Christmas Bird Count, already marked onto the square for Jan.1; and the Boy Scout Christmas Tree Collection the following weekend. The calendar is not only clear and easy to use, but also a wealth of information.

At the bottom of the first page is an introduction to Napa County oaks. I learned that Napa County has the highest density of oaks of any county in California. In fact, 33 percent of our county is covered by oak woodlands.

On the February page, we learn that oak woodlands cover more than 167,000 acres of Napa County. Mixed and coast live oaks are most prevalent in the southwest part of the county, while black oak woodlands are found in the Atlas Peak region and other higher elevations. The calendar describes where other oaks can be found, too.

The March page explores the history of oaks and the important role they played for earlier cultures that thrived in this area. The Wappo tribe, thought to be the sole inhabitants of the Napa Valley until the late 1700s, depended heavily on acorns from several oak species. Acorns were leached of their tannic acid and ground into flour, which was an important part of their diet. If you want to try cooking with acorns, check out <http://bit.ly/Un5Uts> where you can learn how to process these nuts. Then you can try some of the delicious acorn recipes on the site.

The April page digs deeper into oaks and their impact on cultures. In times past, people were drawn to oaks for a variety of reasons. The acorns provided food for them and their animals. The trees, often huge, provided welcome shade and protection for man and beast in summer.

Because of their size and ability to be seen from long distances, oaks were often used as monuments and landmarks or boundary markers.

The May page looks at the habitat that oaks support. Oak woodlands nourish “at least 300 vertebrate species (including at least 120 mammal, 147 bird and 60 reptile and amphibian species); 1,100 plant species; 370 fungal species; and 5,000 arthropod species (insects and mites).” Yikes.

The June content explores a typical situation in Napa County: oaks and vineyards living in harmony. Oaks provide habitat for animals that keep vineyard pests at bay. And with this page on your wall, you won't forget Connelly Ranch Family Farm Day on June 15 or the Wine Country Truck and Tractor Pull on June 29.

The second half of the calendar is as handsome and informative as the first. An extensive listing of local resources on the back page is a bonus. Here you will find information and contact numbers for 19 agencies concerned with our environment, including the Land Trust, Audubon Society, Fish and Game, and the Napa County Master Gardeners.

To obtain a calendar, call the Natural Resource Conservation Service at 707-252-4188; Friends of the River at 707-254-8520; or the Watershed Information Center and Conservancy at 707-259-5936. The calendars are free, but donations are welcomed.

**Napa County Master Gardeners ( <http://cenapa.ucdavis.edu>) answer gardening questions on Monday, Wednesday and Friday, 9 a.m. to noon, at the UC Cooperative Extension office, 1710 Soscol Ave., Suite 4, Napa, 707-253-4221.**

*The Napa County Resource Conservation District proudly presents...*

# Celebrating Salmon and Steelhead

**A series of events to spotlight two of Napa County's most well-traveled fish!**



*Steelhead Trout*

Attend a presentation,  
an open house at the rotary  
screw trap, or both!



*Chinook Salmon*

## Want to learn more about the life cycle, habitat, and current status of salmon and steelhead in Napa County?

Jonathan Koehler, Senior Biologist at RCD, will describe the fascinating life cycle of Chinook salmon and federally threatened steelhead trout, report on their status in the Napa River Watershed, and share what the community can do to keep water in our streams and enhance salmonid habitat.

### Presentation Dates:

**Wednesday, February 13**

**7 pm - 8 pm**

Napa City-County Library  
Community Meeting Room  
580 Coombs St., Napa

**Wednesday, February 27**

**7 pm-8 pm**

Upper Valley Campus of Napa Valley College  
Room 7A  
1088 College Avenue, St. Helena

## Want to get up close and personal with our salmon and steelhead?



Join us at the RCD's rotary screw trap, an 8-foot rotating fish trap located in the Napa River to catch, measure, and release these fish in order to generate population estimates and collect genetic samples. Come and see the day's catch!

### Rotary Screw Trap Open House Dates:

**Saturday, March 30, 2013**

**9 am- 10 am**

**Saturday, April 6, 2013**

**9 am- 10 am**

*Stay tuned to [www.naparcd.org](http://www.naparcd.org) for more events to celebrate salmon and steelhead that will take place in March!*

For more information, or to RSVP, contact: Steph Turnipseed, (707) 252-4188 x111 or [steph@naparcd.org](mailto:steph@naparcd.org)

Funded by:

