

**CCMP Revision – Water Subcommittee Meeting #3  
January 28, 2015**

Attendees: Barry Nelson, Carl Morrison, Carol Mahoney, Harry Seraydarian, Luisa Valiela, Mike Connor, Tom Mumley, Judy Kelly, Caitlin Sweeney, Darcie Luce

Not in Attendance: Campbell Ingram, John Andrew, Leo Winternitz

**NOTES ON PROPOSED ACTIONS (with next steps/assignments noted in red)**

Overall Note: CCMP actions should be reasonably accomplished and achievable within the resources and authority of agencies that sign the CCMP.

**Action 1 – Climate Change Resiliency**

**Climate Change Resiliency (Carol M.)**

1. Increase or preserve open space at Bay edge by \_\_\_\_\_ acres (% shoreline?) by 2020. To achieve this, create a draft municipal/county ordinance that creates an “amenity” credit for developments that provide a buffer from development at the Bay/Delta edge and penalizes through fees developments that extend to the edge. Then fees can be used to purchase land for buffers elsewhere or maintain buffers that exist.
2. Initiate a regional Benefit Assessment District or similar (like LMD – Risk Reduction District?) for those areas within the potential sea-level rise impact zone by 2020 to offset the costs of projects and on-going maintenance for shoreline and infrastructure protection.

**Comments:**

- Looking for nexus of WQ with climate change; a target that connects with BEHGU and local community
- Could fit in another subcommittee topic area
- Add BCDC be in there somewhere; this is a suggestion that locals take more responsibility and finance it.
- Output could be number of local districts formed in 5 years
- **We should merge this with Campbell’s action on Delta restoration (below)**

**Action 2 – Delta Restoration**

**Delta Restoration (Campbell I.) *merge with #1? (think about differences between bay and delta – funding, institutional, etc. But strive for consistency)***

Implementation of the biological opinion objectives and early implementation of restoration projects that incorporate adaptive learning and restore high priority ecosystem function.

Comments:

- Should we parse out our actions in terms of number of acres with an eye to BiOps or should we be looking to BDCP and the potential larger number of acres?
- Use existing BiOps as baseline?
- Output/outcomes: Acreages of habitat – different type of habitats than measured in Bay
- Legally and functionally we have a difference between the Bay and Delta, but we have to strive for consistency
- See what Habitat Committee comes up with
- Comprehensive IRWMP for the Delta? Integrate flood protection and habitat restoration
- Output/outcomes: Acreages of habitat – different type of habitats than measured in Bay
- When I think about what's going to be measured, it's not going to be in the Water section, it's going to be in the Habitat section (**move to Habitat?**)
- **Merge with Action 1 above?**

**Action 3 – Integrated Flood Protection and Habitat Restoration**

**Integrated Flood Protection and Habitat Restoration (Carl M.)**

1. Continue to work with resources and regulatory agencies to beneficially reuse sediment dredged from the Bay and removed from flood protection channels so capacity is maintained to build up baylands in order to protect ecosystem resources as well as provide a greater buffer resulting from sea level rise and increased adverse impacts of wave attenuation. (I can confer with Andy Gunther later to give some numbers on how much is needed. This action, BTW, is front and center in the BEHGU update.)
2. Continue work with the U.S. Army Corps of Engineers (where they manage reservoirs), various NOAA weather-related entities, Scripps's Center for Western Weather and Water Extremes, the Department of Water Resources and others in developing advanced precipitation forecasting to better manage reservoirs not only for water supply purposes (including for ecosystem protection and enhancement) but also for flood protection purposes. This effort would include seeking partial funding for the project through Propositions 84 and 1.
3. Assist and support the statewide effort by flood protection and stormwater agencies in seeking a ballot measure that would amend Proposition 218 to provide such agencies the same exemption now afforded water and wastewater agencies when raising rates. This will enable flood protection and stormwater agencies to construct multipurpose facilities that will also protect and benefit ecosystem resources.

Comments:

- #1 is a permit streamlining action, links to Flood 2.0 and BCDC Bayfill Working Group
  - Measurement will be an increased volume of beneficially reused sediment
- #2 ranks high in feasibility
- #3 will be a funding issue
- Ownership suggestions:
  1. Individual flood protection agencies and baylands stewards, coordinated by BAFPA. BCDC, Water Board, Corps, FW (state and fed)

- 2. SFEP, IRWMP
- 3. BAFPA
- Output/Outcome suggestions:
  - 1. Increased volume of sediment beneficially reused
  - 2. Central weather forecasting tools developed
  - 3. Amended 218
- No next steps determined

#### **Action 4 – Improve Freshwater Inflow/Outflow**

##### **Improve Freshwater In/Outflow (Harry S.)**

Urban state and federal agencies will agree on a plan developed by 2018 to restore freshwater flow index to at least a “fair” condition by 2030.

##### **Comments:**

- Trying to get at federal-state cooperation
- Next step (after State Board’s updated standards) is to create some sort of program to make sure that agencies are doing some aggressive planning to reduce their reliance on the Delta.
- What can we feasibly do to support what we think the State Board can do, based on the current makeup of the Board?
- Harry and Barry to merge actions – Harry’s action is part 2 of Barry’s action

#### **Action 5 – State Water Board Standards for Delta Outflow**

##### **State Water Board Standards for Delta Outflow (Barry N.)**

The State Board should adopt new Bay-Delta standards that will adequately protect all beneficial uses in the estuary, including listed fish species and commercially important species (e.g. Chinook salmon).

##### **Comments:**

- Merge with Action 4 above
- Barry will rewrite to make this more ambitious

#### **Action 6 - Control Emerging Contaminant Discharges to the Bay to Prevent Future Water Quality Problems**

##### **Control Emerging Contaminant Discharges to the Bay to Prevent Future Water Quality Problems (Mike C.)**

- 1. Modify the state’s pesticide regulation program to ensure that the use of these pesticides by urban consumers ensures that regular use of these products will not contaminate Bay watershed streams or the Bay itself.
- 2. Develop an enforcement strategy, evaluate its effectiveness, and develop an evaluation

process for alternatives to implement the new TB 117-2013 to ensure that the new flame retardant regulations are working effectively in SF Bay and not causing new problems with product substitutes.

3. Expand the Alameda County Safe Drug Disposal Ordinance that requires pharmaceutical take-back programs to other counties in the Bay Area and evaluate its effectiveness.
4. Overarching management strategy for CECs with associated monitoring strategy – nonregulatory (Tom)

Comments:

- This is focused on urban use as opposed to ag use
- Fertilizer use shouldn't be lumped together with pesticide use—maybe there's a lawn action that could address this.
- Consider calling for an overarching management strategy to address CECs. This is an opportunity to highlight what we have been doing.
- All fairly accomplishable
- Tom to re-write with help from Mike

**Action 7 - Prevent Raw Sewage Discharges to the Bay by Speeding the Repair of Broken Sewer Laterals**

**Prevent Raw Sewage Discharges to the Bay by Speeding the Repair of Broken Sewer Laterals (Mike C.)**

Require every locality in the Bay Area with a ratio of sewage wet weather flow to dry weather flow exceeding 3-fold to develop a local ordinance requiring sewer system inspection as part of house sale. Require wastewater agencies to develop sewer lateral financing strategies (similar to solar property tax initiatives) to allow residents to fix their broken laterals and pay them back through sewer bill increases.

Comments:

- Various ways to achieve? Action could be focused on developing strategy for replacement
- The best solution is to get it in the real estate but then also identify priorities when fixing the interceptor on which laterals need fixing and then offer a service.
- Suggested output: require inspection on resale of house, or number of local ordinances passed
- Action needs to be a little broader

**Action 8 – Anthropomorphic Impacts**

**Anthropomorphic Impacts (Carol M.)**

1. Reduce homeless encampments in stream-side areas to less than 1% of the total watersheds by 2020.
2. Create a program to employ homeless to help monitor and clean the streams of trash and

debris. (Similar to CHEER)

3. Lobby for and help create a framework for a State education mandate that requires schools to implement a program of watershed science in the classroom at the high school level and if necessary seek funding on the 2020 ballot.
4. Support a constitutional amendment to the definitions in Prop 218 regarding stormwater to allow stormwater and flood agencies to levy fees to maintain infrastructure that reduces these anthropomorphic impacts.

Comments:

- These may be a subset of stormwater quality
- #1 is scratching the surface of a huge problem; not attainable as proposed
- #3 is addressing the trash problem in creeks adjacent to high schools
- #3: put in behavior change item and think about where it belongs: **merge with Barry's action?**
- **#4: merge with Action 3**
- **Maybe move all to Stewardship?**
- **Carol to re-write for Regional Board framework**

**Action 9 – Reduction in Toxicity**

**Reduction in Toxicity (Carol M.)**

1. Establish a “Citizen Science” - “Adopt-A-WQ-Spot” or a “Be the Bay” program to engage local citizens in taking ownership of what goes on in the Bay/Delta. This could be run through a local agency, school, or NGO. Output is to provide this opportunity in 70% of the major watersheds that drain to the Bay/Delta by 2020. Provides citizens with the means to help monitor basic WQ parameters such as Temperature, pH, DO, Spec Cond, and TDS. Advanced groups may be able to monitor more. Citizens can also collect and/or categorize trash at these sites to help determine if the plastic bag ban and similar efforts are having an impact.
2. Within two years, create a “Citizen Science” web portal or app that will allow crowd sourcing of environmental data, similar to e-bird, Project Noah, and Marine Debris Tracker for reporting on the health of the Bay. Get all of our local activities reported on the SciStarter website.
3. Reduce fine particulate matter (PM<sub>2.5</sub>) emissions from local sources below 12 µg/m<sup>3</sup> by 2020 in accordance with NAAQS 2012 requirements and goal of a combined 24-hour concentration not exceeding 30 µg/m<sup>3</sup> for all Bay/Delta Counties. Reduction of GHG is already underway per AB32 and Executive Order S-3-05 by 2020.

Comments:

- This is an effort to capture behavior change; could be moved elsewhere
- #2: one of the challenges we’ve always had is engaging the public in this stuff. The use of social media—we’d be one of the few plans to talk about that. This is an extremely important approach to try with all of our goals, objectives, actions.
- #1 and #3 are too specific and tangential to get at public awareness—red flag concern: broaden to citizen monitoring

- #1 would need a champion, like Save the Bay—there is some interest but it would take a lot of work
- Carol to re-write; dropping #3

## Action 10 – Maintain Aquatic Equilibrium

### Maintain Aquatic Equilibrium (Carol M.)

1. Measure Bay turbidity, algae growth, and monitor clam/mussel populations to establish trends. Use trends in outflow at USGS gages to estimate sediment and/or use SWAMP data for other indicators.
2. Decrease unfiltered wastewater effluent discharges by 10% by 2020 possibly through the use of treatment wetlands or increase use of recycled water inland.
3. Monitor nitrogen/phosphorus trends to confirm the benefits of a reduction in wastewater effluent nutrient input.
4. Monitor salinity in the surrounding groundwater of the Bay/Delta to determine the long-term impacts of rising sea-levels and tides.

### Comments:

- This action is about trying to pull everything together in one cohesive story; trying to move dial from prior CCMP
- #1 is achievable
- #2 is pushing the envelope—building on Ora Loma with a larger pilot program?
- #1 and 3 are essentially being done but do we want to trumpet that in some way?
- Is this aspirational? Should we be paying attention to this because it's going to be a bigger problem in the future?
- Could #4 be part of improved management of water demand?
- #4 is good for climate change
- Add SFEI to #4
- There's strong interest in #2 and we'll keep these other suggestions on the back burner if we can figure out a way to make them practical
- Carol to work with Judy on this offline to define output/outcomes; think about combining this with Action 11 (next)

## Action 11 – Improve Management of Water Demand through Increased Use of Recycled Water

### Improve management of water demand through increased use of recycled water (Harry S.)

Wastewater and water agencies will collaborate and increase Bay Area recycling to 63 thousand acre feet (or 160 thousand acre feet) by 2021 and develop a long term strategy to reach 270 TAF by 2035.

### Comments:

- Numbers need to be refined, using BACWA and Pacific Institute, but should be more aggressive than in prior CCMP

- Everyone send suggested numbers to Harry
- Combine with Action 10

## Action 12 – Landscape Conservation

### Landscape Conservation (Barry N)

Establish a regional goal for the reduction of urban landscape irrigation water use. This could, for example, be a goal of a 40% reduction in urban landscape water use by 2040 or a 50% reduction by 2050. This should be an “aspirational” goal, similar to the State Board’s goals for water recycling and stormwater capture. Those two goals demonstrate the large potential new supply to be gained from recycling and stormwater programs. Neither of those goals, however, is a formal regulatory requirement.

#### Comments:

- Dovetails with application of chemicals to yards and other benefits.
- Output/outcomes: Could either be per capita water use or total water use.
- Broaden so we deal with other outdoor water use.
- How will this be required? Is this aspirational?
- Ought be a regional effort
- Part of this is changing the water ethic, public outreach, etc.
- We have some kind of goal in the IRWMP plan
- Barry to expand to all irrigation/outdoor water use, for example, Caltrans
- Barry to review against IRWMP plan

## Action 13 – Planning for Extended Droughts

### Planning for Extended Droughts (Barry N.)

DWR and urban water agencies should plan for a decade-long drought and implement investments that will help the Bay Area - and the Bay - respond to likely extended droughts in the future.

#### Comments:

- Worth talking to S. Ritchie to see what they’re doing
- The challenge with this is the DWR guidelines are coming out for all of the retailers, and then it will be 5 years from now before the next one comes out—work on the next set of guidelines
- Barry to talk to Ritchie, BAWAC

## Action 14 – Manage or Improve Water Demand through Increased Conservation/Efficiency

### Manage or Improve Water Demand through Increased Conservation/Efficiency (Harry S.)

1. Urban Water Use-Bay Area: Water agencies will collaborate on conservation programs to reduce gallons per capita per day (gpcd) to 124 by 2021 and commit to reduce to 110 gpcd by 2035.

2. Agriculture: State and federal agencies providing water to agriculture dependent on Delta diversions will develop a strategy by 2018 to reduce agricultural use by 6 million acre feet by 2035.

Comments:

- There's going to be an enormous push from the ag community to be more dependent on the Bay-Delta as their groundwater overdraft problem grows.
- If you say reduce the total use, that gets at the real issue.
- #2: we can't compel folks to do this, so maybe what we should think about is encouraging our Bay-Delta ag communities (more stick than hammer)?
- Delta ag in particular is a different world
- Needs more thought: Judy and Harry to have some further conversations about this (?)

**Action 15 – Salmon Fishery Rebuilding Program**

**Salmon Fishery Rebuilding Program (Barry N.)**

Establish a comprehensive state program in the Bay-Delta to restore and maintain a thriving commercial and recreational salmon fishery.

Comments:

- Coordinate with NMFS and CDFW and their recovery plans
- May move to Living Resources

**Actions not discussed:**

- Behavior Change Regarding Water Use
- Explicit Recognition of the Connectivity of the Upper Watershed, Delta, and Bay
- Updated and Integrated Data Management and Analysis
- Coordinated Funding
- Manage Wetlands and Reverse Delta Subsidence for Multiple Benefits

**New Suggested Actions:**

- **TMDL Implementation (Tom M.)**

Comments:

- There is a huge effort that is unfunded to deal with the sediment problems in Napa and Sonoma.
- Need an action that emphasizes BMPs and restoration in support of TMDL implementation
- Add cost effectiveness
- Are there specific types of actions associated with TMDL implementation that we would like to recognize and promote?
- **Green Infrastructure (Tom M.)**



Comments:

- Consider actions associated with promotion, development of green infrastructure
- Look at how many communities actually applied for and received funding through the Sustainable Communities grant recently
- Look at which communities have plans
- Emeryville's ordinance as a model ordinance?
- There's a specific reference to green infrastructure in Prop. 1

- **Stream Protection (Tom M.)**

Comments:

- Are we dropping it? It was in 3 places in the prior CCMP

- **Climate Change Adaptation Planning (Barry N.)**

Comments:

- How to push effectively for sub-regional plans? You've got a ton of stuff happening on this. I'd want to see what BCDC says about this before we write anything in—they're taking a big lead on this
- BEHGU should be the setting for all of this as well. Maybe what would be helpful is we come up with some set of fundamental principles that we'd like to see applied to all of these sub-regional plans.
- When this plan is all done, how does it get out there and get used?

- **Nutrients – as a separate action or under another action?**

Comments:

- We've got to be careful about superseding the process that's in place in terms of a nutrient management strategy; what are the things we could come up with that would have value added?