



## Year Two Major Milestones

### Russian River & Dry Creek Flows

**Milestone:** Within six months after the State Board's public notice of the Water Agency's petition to change Decision 1610, SCWA must begin the California Environmental Quality Act/National Environmental Protection Act (CEQA/NEPA) process by issuing a Notice of Preparation/Notice of Intent.

- ✓ The Water Agency released the Notice of Preparation for the Environmental Impact Report of the Fish Flow and Water Rights Update Project (Fish Flow Project) on September 29, 2010 – six months after the final petition was submitted to the State Board.

**Milestone:** In 2010, the Water Agency must petition the State Board for temporary changes in D1610 that will allow minimum flows to be reduced in the summer in the Russian River.

- ✓ On April 6, 2010, the Water Agency petitioned the State Board requesting changes to minimum flows for 2010. The State Board approved the petition on June 28, with specific conditions.

**Milestone:** Copies of petitions to change D1610 shall be sent to NMFS Santa Rosa office and NMFS shall be included in all mailing lists related to the environmental process; NMFS shall be updated on progress during Section 7 meetings and as public documents are issued.

- ✓ Copies of the NOP and temporary change petitions were provided to NMFS and NMFS staff participated in six public meetings and scoping sessions on D1610 changes.

### Estuary Adaptive Management

**Milestone:** If planned estuary closures don't lead to desired water levels by the end of 2010, the Water Agency must draft a study plan for analyzing the Jenner jetty.

- ✓ Summer 2010 presented only one opportunity to create an outlet channel (July 8). The outlet channel functioned as designed for most of the day. But the outflow of the channel could not overcome a very high tide in the evening combined with a 3-foot south swell. The channel closed at approximately 7 p.m. on July 8. Because of weekend restrictions on Water Agency activities on the beach, crews were unable to maintain the channel until Monday, July 12 – at which point the estuary had reopened.

**Milestone:** The Water Agency must submit to NMFS by March 24, 2010 a preliminary list of structures, properties and infrastructure that could potentially be affected by flooding if the closed sandbar was allowed to naturally breach.

- ✓ The Water Agency has prepared a preliminary list of structures, properties and infrastructure that could be affected.

**Milestone:** The Water Agency, in consultation with NMFS, California Department of Fish & Game (CDFG) and the U.S. Army Corps of Engineers (Corps), is required to annually prepare a barrier beach outlet design by April 1.

- ✓ The Water Agency worked with the required agencies to develop a barrier beach outlet design, which was implemented for the first time on July 8, 2010.

**Milestone:** The Water Agency must conduct and record monthly surveys of the beach topography and the outlet channel. The Water Agency must also use a time lapse video camera to record the interaction of waves, tides and the river mouth.

- ✓ Surveys were conducted of monthly beach topography. The outlet channel remained open for less than a day. A time lapse camera was installed.

**Milestone:** Data to be collected includes hourly water temperature, dissolved oxygen concentration, salinity, and pH. The sondes which collect the data will be calibrated every two weeks.

- ✓ Water quality data was collected hourly for temperature, dissolved oxygen, salinity, and pH and the sondes were calibrated every two weeks. The annual report is currently being drafted.

**Milestone:** The Water Agency is required to conduct ongoing extensive surveys of estuary invertebrates and report findings on an annual basis.

- ✓ Invertebrate survey work continued and the annual report is being drafted.

**Milestone:** From late spring to early fall (when flows are below 300 cfs at Hacienda Bridge), SCWA must conduct monthly surveys of young steelhead in the estuary and steelhead juveniles must be implanted with passive integrated transponder (PIT) tags.

- ✓ Steelhead surveys were conducted through monthly seining and a video-monitored fyke net, and PIT tags were implanted.

**Milestone:** Within nine months of completing the 2009 fish monitoring studies, SCWA must submit an annual report.

- ✓ An annual report is being drafted.

## Dry Creek

**Milestone:** Dry Creek bypass pipeline feasibility study is to be completed by the end of 2010.

- ✓ A draft feasibility study is currently under review. The final study will likely be released in early February 2011.

**Milestone:** Dry Creek habitat enhancement conceptual design is to be completed by the end of 2010.

- ✓ The 10% conceptual design for a one-mile demonstration project was completed in summer 2010 and a 30% design was submitted for regulatory agency and landowner review in October 2010. A feasibility study that covers the full 14 mile length of Dry Creek and considers habitat enhancement opportunities to satisfy the 6-mile mandate in the Biological Opinion will be completed in early 2011.

**Milestone:** Five habitat enhancement or fish passage projects must be built on tributaries to Dry Creek and the Russian River before the end of Year 3.

- ✓ The Grape Creek In-Stream Habitat Improvement Project has been constructed and the Willow Creek Fish Passage Enhancement Project have been funded (the biological opinion required the agency providing \$100,000 to this project). The Grape Creek Fish Passage Enhancement Project, Wallace Creek Fish Passage Enhancement Project, and the Mill Creek Fish Passage Improvement Project are in progress. The Grape and Wallace projects are scheduled for construction in summer 2011. Mill Creek is awaiting landowner agreement.

## Warm Springs Dam

**Milestone:** The Corps must complete a design for construction of an Emergency Water Supply Line for the Don Clausen Fish Hatchery.

- ✓ The Corps is in the process of taking its 30% design to a 65% design level.

## Fish Monitoring in Russian River & Dry Creek

**Milestone:** The Water Agency must do the following:

- Annually operate rotary screwtraps in Dry Creek, at Mirabel and in lower Russian River tributaries to measure juvenile Chinook, coho and steelhead.
- Implement a field sampling effort to capture fry at several Dry Creek locations.
- Monitor the population of steelhead and coho salmon in Dry Creek.
- ✓ On April 22, the Water Agency installed and began operating a rotary screwtrap in Dry Creek, capturing 38 steelhead smolts (a lifestage migrating to the ocean), 4,895 Chinook smolts and 21 coho smolts. The screwtrap at Mirabel was installed on May 4 and captured 43 steelhead smolts, 2,299 Chinook and 181 coho. Juvenile salmonid surveys were conducted Dry Creek during a one-week period in late July and a two-week period in late September-early October.

- ✓ The Water Agency also worked with landowners to install traps in Green Valley Creek, Dutch Bill Creek and Austin Creek. In green Valley Creek, 2,165 coho were counted; in Dutch Bill Creek, 222 coho, 4 Chinook and five steelhead were counted; and in Austin Creek, 103 coho, 24 Chinook and 222 steelhead were counted.

### **Mirabel Fish Screen and Wohler Ponds**

**Milestone:** The Water Agency shall complete design of the new fish screen at Mirabel within three years of the issuance of the biological opinion.

- ✓ After completing a feasibility study that identified a conceptual design acceptable to NMFS and DFG, The Water Agency released a Request for Proposals for the Detailed Engineering Design of the Mirabel Fish Screen Replacement Project. The Water Agency is in the process of selecting an Engineering Consultant to design the replacement fish screen.
- ✓ In summer 2010, the Water Agency submitted a grant application to CDFG for funding a new fish ladder that will enhance the fish screen replacement. The grant application received high marks for technical merit and favorable reviews from the grant review committee. A final decision for funding will be announced by CDFG in February 2011. Because it's more efficient and effective to design and construct the fish ladder/viewing station and replacement fish screen concurrently, the Water Agency is waiting for this funding decision before initiating the detailed engineering design.

**Milestone:** Within three years of the issuance of this biological opinion, the Water Agency shall decommission or modify the infiltration ponds on the East side of the Russian River at the Mirabel/Wohler facility.

- ✓ The Water Agency has completed the CEQA process and permitting required to decommission and modify infiltration ponds. Construction will commence in spring 2011.

# Year Three Major Milestones

## Russian River & Dry Creek Flows

**Milestone:** The Water Agency Board of Directors shall certify a final California Environmental Quality Act/National Environmental Protection Act (CEQA/NEPA) document within four years of filing a petition with the State Water Board to modify D1610. (This milestone means that the Water Agency must focus on the preparation of an Environmental Impact Report during Years 3 and 4 of implementation of the biological opinion.)

**Milestone:** In 2011, the Water Agency must petition the State Board for temporary changes in D1610 that will allow minimum flows to be reduced in the summer in the Russian River.

**Milestone:** Copies of petitions to change D1610 shall be sent to NMFS Santa Rosa office and NMFS shall be included in all mailing lists related to the environmental process; NMFS shall be updated on progress during Section 7 meetings and as public documents are issued

## Estuary Adaptive Management

**Milestone:** If planned estuary closures don't lead to desired water levels by the end of 2010, the Water Agency must draft a study plan for analyzing the Jenner jetty.

**Milestone:** The Water Agency, in consultation with NMFS, California Department of Fish & Game (CDFG) and the U.S. Army Corps of Engineers (Corps), is required to annually prepare a barrier beach outlet design by April 1.

**Milestone:** The Water Agency must conduct and record monthly surveys of the beach topography and the outlet channel. The Water Agency must also use a time lapse video camera to record the interaction of waves, tides and the river mouth.

**Milestone:** The Water Agency must conduct estuary water quality monitoring and report the results on an annual basis. The sondes which collect the data must be calibrated every three weeks.

**Milestone:** The Water Agency is required to conduct ongoing extensive surveys of estuary invertebrates.

**Milestone:** From late spring to early fall (when flows are below 300 cfs at Hacienda Bridge), SCWA must conduct monthly surveys of young steelhead in the estuary.

**Milestone:** Within nine months of completing the annual fish monitoring studies, SCWA must submit an annual report.

### **Dry Creek**

**Milestone:** Five habitat enhancement or fish passage projects must be built on Dry Creek tributaries before the end of Year 3.

### **Warm Springs Dam**

**Milestone:** The Corps must complete construction of a flow bypass system for the Don Clausen Fish Hatchery by 2012.

### **Fish Monitoring in Russian River & Dry Creek**

**Milestone:** The Water Agency must do the following:

- Annually operate rotary screwtraps at Mirabel and in lower Dry Creek to measure juvenile Chinook, coho and steelhead.
- Implement a field sampling effort to capture fry at several Dry Creek locations.
- Conduct an annual juvenile steelhead and coho salmon rearing survey during Warm Springs Dam inspection periods, when water releases are lower.

### **Mirabel Fish Screen and Wohler Ponds**

**Milestone:** The Water Agency shall complete design of the new fish screen at Mirabel within three years of the issuance of the biological opinion.

**Milestone:** Within three years of the issuance of this biological opinion, the Water Agency shall decommission or modify the infiltration ponds on the East side of the Russian River at the Mirabel/Wohler facility.