## ITEM: INFORMATIONAL ITEMS/STAFF REPORTS

## 21. CARMEL RIVER FISHERY REPORT

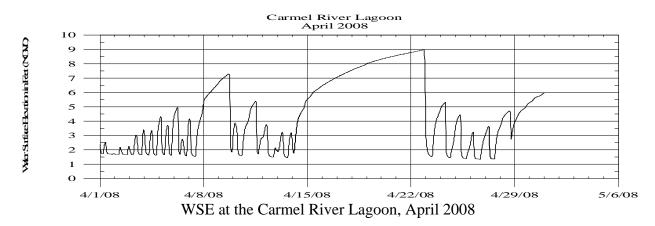
Meeting Date:	May 19, 2008	Budgeted:	N/A
From:	Darby Fuerst, General Manager	Program/ Line Item No.:	N/A
Prepared By:	<b>Beverly Chaney</b>	Cost Estimate:	N/A
	el Approval: N/A ommendation: N/A once: N/A		

**AQUATIC HABITAT AND FLOW CONDITIONS:** During April 2008, Carmel River streamflow conditions were good to fair for downstream juvenile fish migration, and juvenile fish rearing, and fair to poor for upstream and downstream adult fish migration. There was continuous flow to the Carmel River Lagoon, but several critical riffles formed in the lower valley as flows dropped later in the month.

During April 2008, the mean daily streamflow recorded at the District's Carmel River at Sleepy Hollow Weir gaging station averaged 45 cubic feet per second (cfs) and ranged from 32 to 66 cfs. During April 2008, only 0.25 inches of rainfall were recorded at California American Water's (CAW) San Clemente Dam. The long-term average rainfall for April at this location is 1.71 inches. The rainfall total for Water Year 2008 to date is 19.61 inches, which is 95% of the long-term average of 20.62 inches for the water year to date.

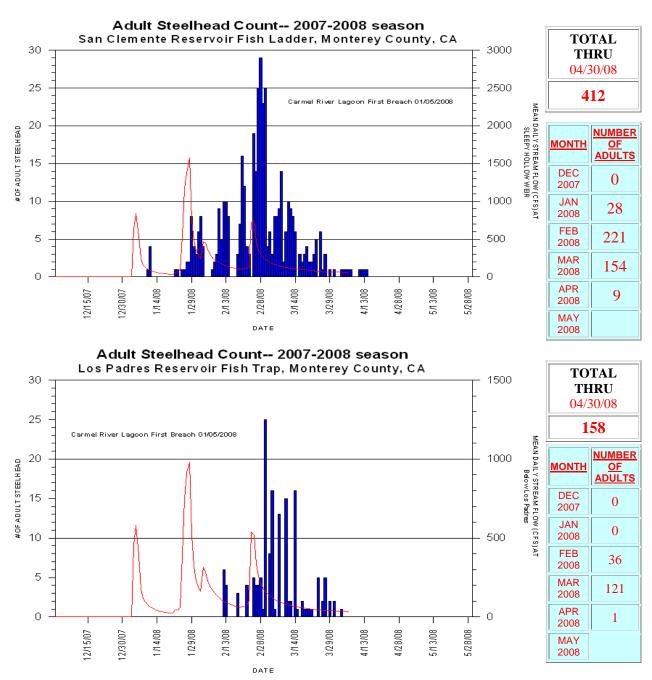
**CARMEL RIVER LAGOON:** On January 5, 2008, the lagoon's water surface elevation (WSE) rose from approximately six feet to 12.6 feet, the highest WSE recorded since the MPWMD began collecting continuous use WSE data at the lagoon in August 1991. This occurrence was attributable to the combination of storm waves and a rapidly rising river. Subsequently, the lagoon sand berm breached naturally to the southern end of the beach and the WSE dropped to between two and four feet.

During April, the lagoon's WSE fluctuated between 1.5 and 9.0 feet above mean sea level as the river filled the lagoon, eventually breaking through the sand bar and draining (see chart below).



**ADULT STEELHEAD COUNTS AT SAN CLEMENTE and LOS PADRES DAMS:** The fish counter at San Clemente Dam was installed in December 2007 for the 2007-2008 season. The first upstream migrating fish was counted on January 10, 2008 (see graph below). As of April 30, 2008, 412 steelhead had been counted, nearly twice the total for the 2006-2007 season, when approximately 222 adults were counted through early April. The start of this year's adult migration was approximately four weeks earlier due to the early January storm and lagoon opening. Adults also continued to migrate upstream an additional 12 days into April, compared to last year (i.e., 2007). This year's total is the highest since 2003. All fish are being digitally videotaped for future analysis.

As of April 30, 2008, 158 adult steelhead had been counted passing California American Water's (CAW's) Los Padres Dam fish trap and truck facility (i.e., the eighth highest number since 1949). This number amounts to 38% of the fish that passed San Clemente Dam.



2008, staff walked the Carmel River from the Highway 1 Bridge (River Mile 1.1) to San Clemente Dam (SCD) (River Mile 18.6). The survey's goals were to: a) quantify the number of spawning redds (nests) and adult fish (including spawning pairs, singles, kelts, and carcasses) in the mainstem river below SCD, and compare those numbers to the fish passage counts at SCD in order to make a better estimate of the river's total steelhead run size this year; b) assess locations where adult steelhead may become stranded and need to be rescued as flows decrease; and c) assess the relative numbers of steelhead smolts that may be remaining in the river.

<u>Summary of 2008 Redd Survey:</u> Between Highway 1 and SCD, 135 redds, 30 adults (including one spawning pair, two "fresh" single fish, seven kelts, and 19 carcasses), zero smolts, zero small juveniles, and numerous fry were observed. Of these totals, 36 redds and four live adults were counted downstream of Robinson Canyon Bridge (RM 8.5). At 45 cfs, the reach between Highway 1 and Valley Greens Bridge had a couple shallow glides and riffles that could potentially impact upstream and downstream migration of adults and smolts. The lack of smolts may be due to the relatively early timing of the survey and the very low abundance of juvenile steelhead in the river the previous fall. The abundance of fry is consistent with the January lagoon opening and excellent spawning conditions in the lower river.

**SLEEPY HOLLOW STEELHEAD REARING FACILITY:** During April, staff continued preparing the Facility for the 2008 juvenile steelhead rescue and rearing program. Staff anticipates the first rescued fish arriving at the Facility in mid-May.

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