

BOLINAS COMMUNITY PUBLIC UTILITY DISTRICT

BCPUD

BOX 390 270 ELM ROAD BOLINAS CALIFORNIA 94924

415 868 1224



May 6, 2010

VIA E-MAIL

Supervisor Steve Kinsey
Marin County Board of Supervisors
Marin County Civic Center
3501 Civic Center Drive, Suite 329
San Rafael, California 94903

draft

Re: Water Supply Status – Bolinas Community Public Utility District

Dear Supervisor Kinsey:

On behalf of the Bolinas Community Public Utility District (“BCPUD”), this letter is in response to your request for a brief report on the current status of the district’s water supply. As you likely are aware, the district’s primary water source is the Arroyo Hondo Creek, located in the boundaries of the Point Reyes National Seashore; the district also has two reservoirs that collect surface water runoff, Woodrat #1 and Woodrat #2, with a combined storage capacity of 56 acre feet of water. Due to the limited nature of our water supply and to ensure sufficient water for existing customers for domestic use, sanitation and fire protection purposes, the district in the 1970’s declared a water emergency and imposed a moratorium on new connections to the water supply. Since that time, the district has carefully monitored its water supply and customer consumption, imposed limits on water use incident to home improvements, continued its voluntary rationing program, taken steps to increase storage capacity and repair, maintain and improve deficiencies in the water distribution system, and so forth; despite these efforts, water shortage emergency conditions persist and the moratorium remains in effect.

So far this season (i.e. July 1, 2009 – June 30, 2010), the Arroyo Hondo Creek is flowing well and our two reservoirs are at capacity because we have received approximately 38 inches of rain. Last season, however, the district experienced unprecedented water supply shortages due to the lack of rain during a third full year of drought conditions. The Arroyo Hondo Creek was at historic low levels, one reservoir was completely empty (Woodrat #2) and the remaining reservoir (Woodrat#1) was down to about 6 million gallons of water. As of the end of January 2009, the district had received only 9 inches of rain and no significant rain was in the forecast. For the first time ever, the district on January 28, 2009 imposed mandatory rationing on our customers – limiting water to no more than 150 gallons *per meter* (not per person), per day. The response from our customer base was remarkable: 99% of our customers stayed within or under the imposed ration amount and many customers voluntarily implemented additional conservation measures (such installing low flow plumbing fixtures, water-efficient washing machines and rain catchment systems). Fortunately, it rained in February and March 2009, which allowed us to repeal the mandatory rationing on March 18, 2009 and return to voluntary rationing status.

Please contact me if you have any questions or would like to discuss any aspect of this letter.

Very truly yours,

Jennifer Blackman
General Manager

Inverness Public Utility District Water System: An Overview

Authority: The IPUD Water System is one of the two operating departments of the Inverness Public Utility District; the other department is the Inverness Volunteer Fire Department. Thus, the IPUD provides fire protection and municipal water service to the unincorporated community of Inverness, which is located on the west shore of Tomales Bay in the western part of Marin County.

The Inverness Public Utility District was formed by the voters in 1948 as a special district under the California Public Utility District Act. The District is governed by an elected five-member Board of Directors that sets policy and water rates. The District has historical (pre-1914) water rights.

Jurisdiction: The District encompasses some 1600 acres (approx. 2.5 square miles), of which 500-600 acres are watershed. The most important 373 acres of the watershed are in public ownership; the District owns 190 acres and Tomales Bay State Park owns 183 acres. The District effectively manages the entire publicly-owned watershed, including the portion owned by the State Park. The District is bounded on the north by Tomales Bay State Park, on the west by Point Reyes National Seashore, on the east by Tomales Bay, and on the south by North Marin Water District (there is no direction in which the District could expand its boundaries). The Water System's customer service area is along (principally to the west of) Sir Francis Drake Blvd. from near Dream Farm Road on the south to Pierce Point Road on the north. Within the Water System's service area are 506 customer connections; all services are metered.

Collection system and Treatment facilities: The District's sources of supply are the streams located above the town in the watershed. Water from the collection system is filtered (using Memcor Continuous Microfiltration (CMF) microfilament membrane package units) and chlorinated; there is no other chemical treatment of the water.

Storage facilities: Tanks at five sites store a total of 425,000 gallons of finished water. Due to this limited storage capacity, IPUD is able to store approximately 3-4 days worth of treated water during peak demand season.

Water Supply: During low-rainfall years, IPUD has continued to meet the domestic water supply needs of the community, as well as meet fire flow requirements. IPUD keeps a close watch on water supply and usage, and when conditions warrant, IPUD notifies the community when conservation is needed. Historically, the Inverness Community has responded to calls for conservation and water supply needs have been met.

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April 29, 2010

From: Leighton Hills [mailto:leighton@bollibokka.com]

Sent: Tuesday, May 04, 2010 6:19 PM

To: Crosse, Liza

Subject: RE: Short Overview - Muir Beach CSD

The Muir Beach Community Services District was formed 52 years ago by the voters of Muir Beach and is now responsible for providing municipal drinking water (among other services such as fire protection) to the 300 residents of Muir Beach. The District's service area includes the Muir Beach residential area, Green Gulch Zen Center (fire protection but not drinking water), the Pelican Inn and the public lands of the GGNRA. The District's water is drawn from two relatively shallow wells adjacent to Redwood Creek, the creek which flows from Muir Woods to the ocean, and which contains threatened and endangered species of salmon and steelhead.

Given the small population base, a primary challenge for the District is having adequate capital to replace and upgrade its aging water system. In the early 1990s, the residents imposed a self-tax of \$300/yr per parcel to begin a capital improvement fund for the water system. The District is at present using \$550,000 from this fund to pay for construction of a new 200,000 gallon seismically-secure pre-stressed concrete water tank, with completion of the tank expected by the end of June. Capital reserves will have to be rebuilt over the next few years in order to replace some aging portions of the water system's water mains – the next project on the list.

As a requirement of the issuance of a water rights permit issued to the District in 2001, the community must draw under 45,000 gallons per day from its water wells and under 40,000 gallons per day during drought conditions. Through years of successful efforts by residents to reduce water consumption, average usage is down from approximately 40,000 gallons per day ten years ago to approximately 23,000 gallons per day at present. Although the community's aquifer is not affected much by even multi-year droughts, flow conditions in the creek at the end of the dry season are very sensitive to annual rainfall amounts. With this year's relatively high rainfall (and with that rainfall coming late in the season) the District expects that flow conditions in the creek will not trigger the reduced pumping threshold contained in the District's water rights permit.

The Muir Beach community is working with the National Park Service to further reduce potential impacts on aquatic life in Redwood Creek. One possible project under exploration is creation of a frog-pond type reservoir adjacent to the creek on National Park Service land from which water could be pumped into Redwood Creek during the summer months whenever the community's water wells were pumping, thereby supplementing flows in the creek and offsetting withdrawals possibly stemming from operation of the community's wells. The cost of construction of a frog-pond type reservoir is obviously a fraction of that for storage of finished drinking water. This makes it conceivable that a summer season's worth of water could be stored off-stream – a storage volume which could never be afforded using conventional water tanks.

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Leighton Hills, General Manager, Muir Beach CSD

415-383-7102

From: Ed Schmidt [mailto:ed@stinson-beach-cwd.dst.ca.us]
Sent: Wednesday, May 05, 2010 3:17 PM
To: Crosse, Liza
Cc: tyeyaksb@yahoo.com
Subject: some info. about SBCWD water supply and plans for the future.

Lizza,

Because of higher than normal rainfall and increased water conservation efforts , it is doubtful that the district would adopt any DROUGHT RESPONSE RATES this summer. We are having no difficulty utilizing our groundwater wells and thus minimizing the amount of creek diversions.

On April 15 of 2009, the district adopted a DROUGHT RESPONSE PLAN that would be implemented if the district's water supply, over a seven day period, failed to keep up with demand. We are glad to report that this emergency plan has not been needed.

The district is fortunate in having sufficient storage capacity to store about 6 (high demand/summer) days worth of water supply. This is enough capacity to see us through the peak week-ends. We then re-fill our storage tanks after the demand subsides. Both residents and visitors have shown excellent water conservation practices.

The district has a 5 year Capital Improvement Program that identifies the need for a new groundwater well, new water treatment plant and replacement of many water service lines. New treatment technologies and new water quality regulations require upgrading the treatment plant capabilities. These projects, which are being funded by a recent increase in water rates, will increase the water supply and water distribution system reliability. Older, inefficient water lines are continually being replaced with new ones to provide for a greater flow of water, which is improving fire flow capability and reduces the amount of lost water.

Customer Water line leaks are being found faster since the district recently converted to monthly billing.

If you would like to see a copy of our annual operating report, water quality report, capital improvement program, or annual financial statement, please let me know.
Thanks, Ed