

Humboldt Bay Municipal Water District

Water Resource Planning

**Implementation Plan
to Evaluate and Advance Recommended
Water Use Options**

April 14, 2011

Draft

This document is based on, and then builds upon, the significant public and stakeholder input the District received in 2009 and 2010. The District requests comments and input on the draft Plan by June 30, 2011

Two Public Input Sessions/ Hearings will be held on July 14th (one in the day and one in the evening) to solicit and accept additional public input

Implementation Plan to Evaluate and Advance Recommended Water Use Options

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HUMBOLDT BAY MUNICIPAL WATER DISTRICT
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1) Introduction to the HBMWD

The Humboldt Bay Municipal Water District was formed in 1956 pursuant to the California Municipal Water District Act. The District was created to develop a regional water system that provides a reliable supply of drinking and industrial water to customers in the greater Humboldt Bay area of Humboldt County.

The District's Mission is to:

1. reliably deliver high quality drinking water to the communities and customers the District serves in the greater Humboldt Bay Area at a reasonable cost;
2. reliably deliver untreated water to the District's wholesale industrial customer(s) at a reasonable cost; and
3. protect the long-term water supply and water quality interests of the District in the Mad River watershed.

1.1 Customers

The District operates almost exclusively at the wholesale level. The District supplies drinking water to seven public agencies, who in turn, serve the residents, businesses and industries in the greater Humboldt Bay region. The District's wholesale municipal customers are the cities of Arcata, Eureka, Blue Lake, and four Community Service Districts - Fieldbrook-Glendale, Humboldt, Manila, and McKinleyville.

For almost 50 years, the District also supplied untreated water to two large industrial customers (pulp mills) on the Samoa Peninsula.

1.2 Operations and Facilities

Current operations of the District include: 1) Ruth Lake in southern Trinity County, which provides the reliable year-round water supply, 2) a hydro-electric power house at Matthews Dam on Ruth Lake, 3) diversion, pumping and control facilities on the Mad River at Essex (near Arcata), 4) storage and treatment facilities at various locations, and 5) pipeline systems that deliver either treated drinking water or untreated surface water to customers throughout the Humboldt Bay region.

The District operates and maintains two *separate and distinct* water delivery systems:

1. an Industrial Water System, capable of supplying 60 million gallons per day (MGD) of untreated water to industrial customer(s) on the Samoa Peninsula, and
2. a Domestic Water System capable of supplying about 20 MGD of treated drinking water for the municipal customers and community.

The distinction between the Domestic and Industrial systems is important in understanding the District's advantages and constraints in regards to planning future water uses:

- Given their relative capacities - 60 MGD industrial and 20 MGD municipal - 75% of the District's supply and delivery capacity is on the Industrial system.
- The systems are dedicated for their respective uses - ***the industrial system (in its current state) cannot supply drinking water.*** So although the District has ample water supply available under its permit from the State, the District can only provide about 20 MGD of drinking water unless significant infrastructure is added to the domestic water system.

1.3 Water Rights

The State of California – via the State Water Resources Control Board (SWRCB) - manages surface water resources within the state. The SWRCB accepts applications and issues permits to agencies or other parties who wish to “use” water for a specific public purpose.

The District has been granted water rights permits for municipal and industrial water use. The permits allow the District to store 48,030 acre-feet of water at Ruth Lake, and then divert up to 116 cubic feet per second (cfs) at its diversion facilities on the Mad River located 75 miles downstream near Arcata. (Note: 116 cfs = 75 million gallons per day (MGD), the latter being the units in which HBMWD measures water delivery to its wholesale customers)

The physical facilities of the regional water system, plus these water rights, are what allow the District to provide a highly reliable, year-round water supply of 75 MGD.

Water law is also an important factor in understanding the District's advantages and constraints in regards to planning future water uses.

2) Key Challenges Facing the District

The key challenge facing the District is the loss of its entire industrial customer base. This has resulted in:

1. a significant loss in revenues which has shifted substantial costs to the District's municipal customers;
2. non-use of the Industrial Water System which is now sitting idled; and
3. under-utilization of the District's water rights which will be lost if not used once again.

From the early 1960's until 1999, the District had long-term contracts in place with one or two large industrial users (pulp mills) on the Samoa Peninsula. For much of this period, the entire 60 MGD capacity of the District's Industrial Water System was under contract to these mills. During this period, the two mills regularly used 40 to 50 MGD, which was *4 to 5 times greater* than the *total* municipal use for the entire Humboldt Bay region (Figure 1).

In the mid-1990's, the Simpson Pulp Mill ceased operation resulting in a significant reduction in District water deliveries (Figure 1). Shortly thereafter, the remaining pulp mill reduced its

contract commitment to about half of what it had been historically. In 2009, that mill ceased operation and remains closed today with no prospect of resuming operation.

Over the last 30 years, total municipal use has been quite constant averaging about 10 MGD. Industrial water use is now zero.

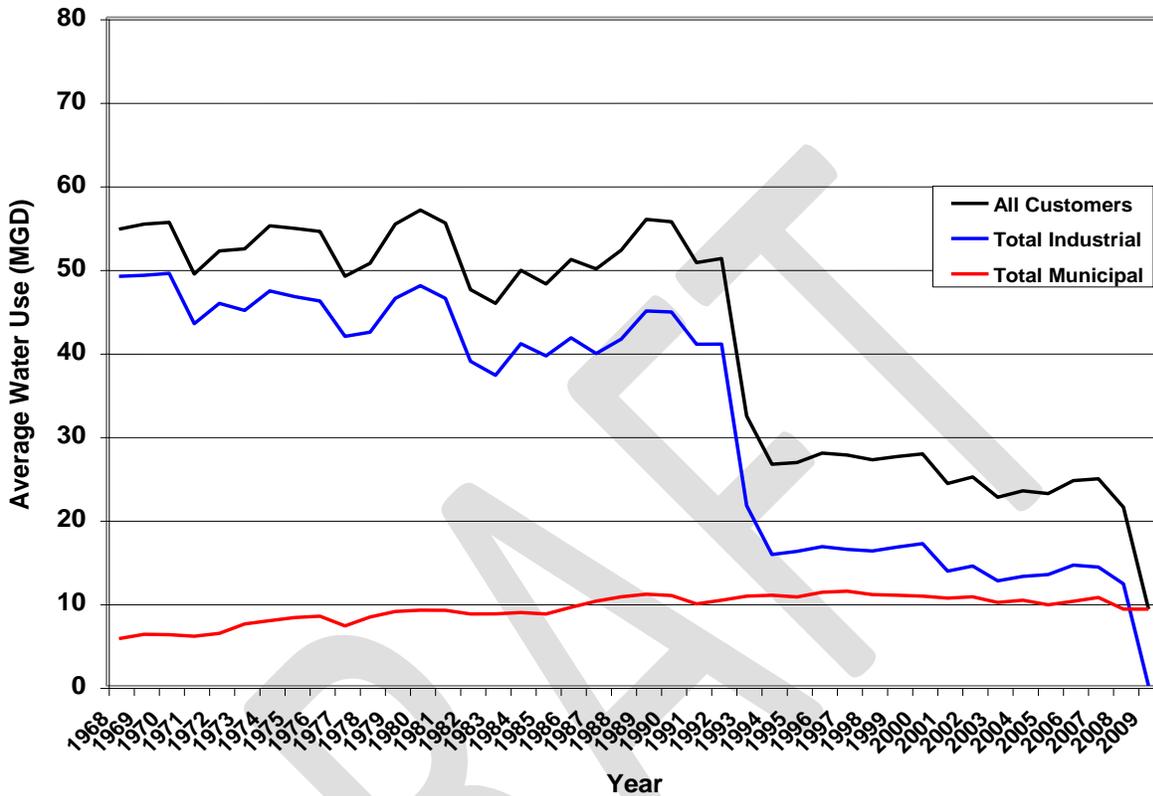


Figure 1. Annual average municipal and industrial water used (MGD)

3) Implications of this Loss

3.1 Financial

Loss of the industrial customers has created significant issues for the District and its municipal customers. Loss of the mills – which at one time paid 75% of the District’s costs of operating, maintaining and improving the regional water system -- has triggered significant cost increases to the District’s municipal customers. This in turn has triggered significant increases in retail water rates in all communities.

Additional revenues are desired to offset the current ratepayer burden of shouldering the entire cost of the regional water system. Furthermore, additional revenues are needed to fund costly infrastructure replacements given that most operational elements of the regional water system are 50 years old. Infrastructure replacements must be done to maintain the reliability and integrity of the regional water system. Additional details regarding wholesale cost increases and impacts on retail water rates are presented in Appendix 1.

3.2 District Water Rights and Ability to Maintain Local Control

In addition to economic and ratepayer ramifications, loss of the industrial customer base has created a unique challenge with respect to the District’s water rights.

A key principle in California water law regarding utilization of a water right is how much control a permittee (like the District) will have compared to the SWRCB or others. As a general rule, if a permittee is complying with the terms of its permit (including any changes), then the permittee has full control over the water right. However, if a permittee fails to put all of the water under permit to use, then the SWRCB will, at the end of the permit period, reduce the quantity of water under the water right permit to the amount the permittee has *actually used*. It is in essence a “use it or lose it” mechanism. The failure to use that water creates the opportunity for new parties to try to obtain rights to the unused water.

Since the two pulp mills ceased operation, the District has faced an appreciable reduction in its permitted water use. Figure 2 presents the permitted diversion authorized in the District’s water rights permits versus the District’s actual diversions. There is a significant gap between the permitted use and that which the District is currently using. The District must put this available water to beneficial use during the current permit term (between now and 2029) or risk losing the unused amount.

Appendix 2 presents additional details regarding California water rights law and the District’s water rights permits.

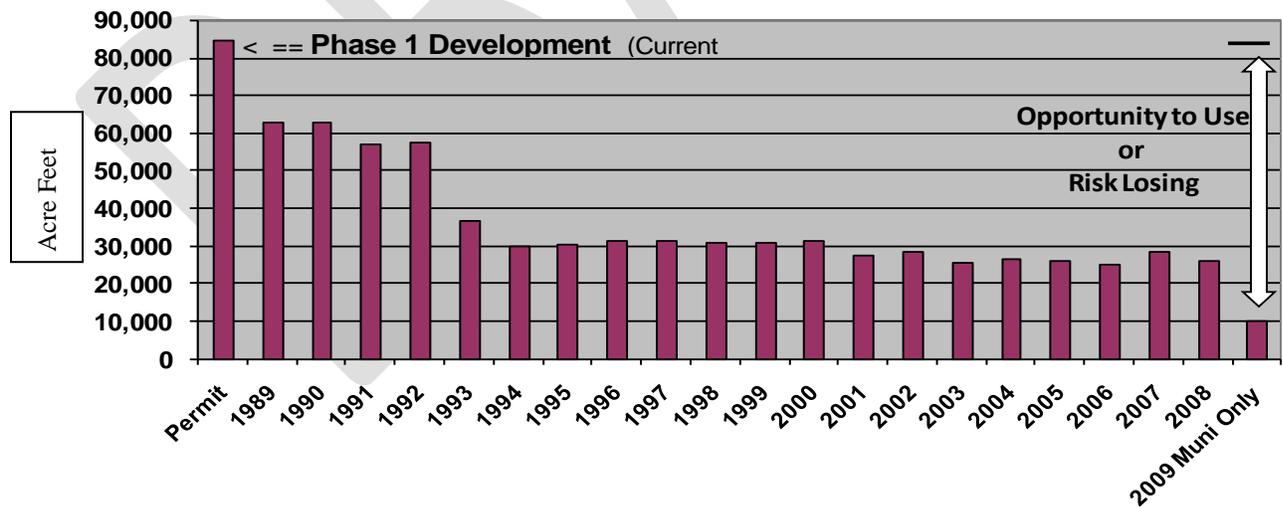


Figure 2. Annual permitted diversion versus actual diversion in acre-feet/year (AFY)

4) Planning Process to Address the Loss of Customer Base

In 2005, the Board of Directors embarked on a planning process to address long-term issues of strategic importance to the District. The goal was to ensure the long-term integrity and viability of the regional water supply and system such that the District continues to meet its important service mission to the community. The Board agreed on two initiatives that warrant priority attention in the coming years - Infrastructure Planning and Water Resource Planning.

To address the significant revenue loss and to avoid the eventual loss of its water rights, the District must find additional water uses - up to 50 MGD. The District turned to the community to identify possible water use options and to provide input on important trade-offs that are inevitable.

The District's outreach to the community was wide-ranging and in-depth. To lead the process, the Board created an Advisory Committee comprised of three representatives from its Municipal Customer group, nine citizens representing multiple stakeholder perspectives, and two members of the Board. The Advisory Committee began its work in June 2009. During a 14-month process, they gathered input from the public at 11 meetings, conducted an educational Water Workshop, and formed a Citizen's Study Group comprised of stakeholders and citizens randomly selected and invited from voter rolls. The District used television, radio, print media, and the Internet to further communicate with the community. Over 30 articles appeared in eight newspapers or newsletters, and the District gave 22 presentations to various stakeholder groups throughout the County.

The Advisory Committee accomplished much work. They:

1. Created a "Framework for Evaluating Water Resource Planning Options"
2. Provided public outreach and education
3. Gathered public and stakeholder input on water-use options
4. Created descriptions and conducted initial research on possible water-use options
5. Analyzed the options
6. Provided recommendations to the District's Board of Directors

There are three broad categories in which the District can achieve increased water use:

- (i) Use additional water *within* the District via projects that increase the consumptive use of water within the current District boundaries.
- (ii) Transfer water for use *outside* of the District's existing service territory via projects that would generate revenues by selling water (not the underlying water right) to a Municipality or other party who would then put the water to "beneficial use." Such a transfer would only occur under a strictly defined contract which protects the District and local interests.
- (iii) Transfer water for environmental benefit via projects that provides water for environmental restoration or enhancement.

Under these broad categories, the Advisory Committee generated 13 possible water-use options based on public and stakeholder input. Following their evaluation, they recommended 11 options to the District. The Advisory Committee presented their findings and recommendations to the District in a comprehensive report in August 2010.

Appendix 3 contains the title page, executive summary, and table of contents of their report, as well as the Framework for Evaluating Water Resource Planning Options. The complete report is available on-line (www.hbmwd.com) or may be obtained by calling (707)443-5018.

This thoughtful community-based planning process helped the District educate the public and raise awareness of the District's unique situation and its implications.

5) Water Use Goals

The Board of Directors accepted the Advisory Committee's report and water use recommendations. The next steps are to evaluate the most promising options and take appropriate steps towards implementation such that the District achieves additional water use. To guide this next phase of work, the Board established three goals:

- Protection of HBMWD's Water Rights – increase water use such that HBMWD maintains control of this water resource for the benefit of our community;
- Fiscal Sustainability – generate revenues to contribute to the current operation and maintenance of the regional water system, as well as upcoming costly capital replacement projects (given that the system is 50 years old);
- Environmental Sustainability – preserve the Mad River environment, and if possible, enhance it.

6) Water-Use Options the District will Consider and Evaluate

The Board segmented the recommended water-use options into two tiers. The District will pursue the top tier options before pursuing the second-tier options.

Top Tier: Options the District will actively consider, evaluate, and as appropriate, pursue:

- a) *Local* commercial, industrial or agricultural water sales. This option would include other viable water-use options within the District, such as aquaculture.
- b) Transfer of water to another public agency outside of the District for an authorized beneficial use (e.g. municipal, industrial, environmental). Such a transfer would only occur under a strictly defined contract which protects the District and local interests. CA water law also would protect the District's underlying water right.
- c) Dedicating some portion of the available water for in-stream flows in the Mad River. Such water would otherwise be in storage at Ruth reservoir for much of the year (i.e. summer and fall). This option is available pursuant to section 1707 of the California Water Code, which is intended to promote water transfers for the benefit of the environment. For such a transfer to occur there must be defined environmental benefit. This option will require studies to substantiate environmental benefit and address potential adverse effects, especially in the estuary. For this option to be considered, the District will pursue technical support and funding from Resource

Agencies or other interested parties, to limit the District's municipal customers (therefore ratepayers) from funding costly studies.

Second Tier: Options the District will consider, and as appropriate support, if they are recommended or advanced by an interested party. This includes several water-use options recommended by the Advisory Committee, as well as any new option generated prospectively. Examples of such uses include: expanding the current District boundary; creating a lake in Blue Lake; using river water in lieu of well water at the Mad River hatchery; transferring water to a private entity for use outside of the District; and installation of micro-hydro.

Options Not Under Consideration: The Board decided two water-use options generated by the Advisory Committee will not be pursued – building a large diameter pipeline to Mendocino or Sonoma counties in the North Coast Railroad right-of-way, and transferring water from the Mad River to an adjacent watershed (Van Duzen or Trinity) just downstream of Ruth reservoir. They deemed these options too costly, too risky, and too permanent from the perspective of maintaining flexibility and control for local needs. Additionally, the pipeline option would be burdened with significant operations and maintenance costs, and would likely be fraught with the same stability issues in the Eel River canyon which plagued the railroad. The watershed transfer option would create an upstream out-of-basin transfer on the Mad River which would likely cause adverse impacts to the Mad River watershed.

7) Available Water Supply

The District has 40 to 50 million gallons per day (MGD) of untreated water available year-round. This is equivalent to 45,000- 56,000 acre-feet/year.

To determine the volume of water available for a specific water-use proposal under options “b”(transfer to another public agency) or “c” (dedicating a portion for in-stream flows), the District will be very protective of local interests – both long-term municipal water supply needs, as well as any new commercial, industrial, agricultural or aquaculture needs.

The volume available for a longer-term use will be established in the context of the proposed use as well as proposed term. The District would generally be willing to offer a larger volume for a shorter term, but would limit the volume available for longer-terms so as to protect local interests. There may be opportunities to consider unique packages – for example combinations of short-term and long-term contracts (especially for option “b” – transfers to another public agency). Such packages would protect the water supplies needed to meet local demands (option “a”) in a manner that is consistent with long-term, sustainable use of water in Humboldt County.

For option “b” (transfers to another public agency) and option “c” (dedicating a portion for in-stream flows), the District suggests consideration and evaluation of the feasibility, costs, benefits, and effects in discrete increments – say 5, 10 or 20 MGD. For option “b” (transfers to another public agency), the District will also pay particular attention to urban water conservation activities by that agency and, if appropriate, that agency's plans for environmental restoration measures.

8) Purpose of this Plan and How it Will be Used

The purpose of this Plan is to guide evaluation of the recommended water-use options and to define activities to advance, and hopefully pursue, a suite of options.

It is important that the District have such a plan to share with the State Water Resources Control Board and the Department of Water Resources (via the District's Urban Water Management Plan). It is also important with respect to continuing to build local and regional alliances to support eventual implementation.

The California Environmental Quality Act (CEQA) requires that all public agencies evaluate the potential effects on the environment of their discretionary activities before they undertake those activities. The District is still in the process of evaluating and formulating which project(s) may be a part of a final plan it intends to implement. Such preliminary planning needed to develop projects does not trigger the requirement to prepare an environmental analysis under CEQA, particularly where, as here, the District is committed to conducting a CEQA analysis of any project before proceeding.

Evaluation, and eventual pursuit, of water-use options which substantively increase the use of HBMWD's available water will be challenging and take time. Fortunately, in the absence of a third-party challenge, the District has time. Its water right permits do not expire until 2029. That being said, the District should address this matter expeditiously for several reasons:

- Revenues are necessary to offset the current municipal customer and ratepayer burden of shouldering the entire cost of the regional water system, as well as to fund costly infrastructure replacement projects which must be done soon to maintain the reliability and integrity of the regional system;
- The community – both public who participated in the planning process as well as stakeholder groups – better understand the issue and are supportive of what we are doing;
- It will take time to effectuate an increase in water use (unless a pulp-mill equivalent opportunity presents itself locally, which is not likely). It will likely take:
 - one-to-two years to complete preliminary studies;
 - three-to-five years to complete the necessary environmental studies pursuant to the California Environmental Quality Act (CEQA) and to obtain permits, including approval from the State Water Resources Control Board to change the District's water rights permits (which will be required for options b and c);
 - two-to-three years to obtain financing and implement a “project”.

In summary, it will likely take six to ten years to achieve an increase in water use, unless a new water-intensive business decides to locate within the District's service territory.

Activities defined in this plan are intended to guide consideration, evaluation, and eventual pursuit, of the recommended water-use options. The process the District envisions going forward is generally as follows:

- 1) Raise awareness of the District’s situation – and the associated opportunity – and garner support, first locally, and then on an expanded scale.
- 2) Identify and pursue partners and resources to support and fund initial studies – whether market potential, economics, logistics, or environmental.
- 3) Conduct reconnaissance-level studies to assess the economic and environmental feasibility of specific options (especially options “b” and “c”).
- 4) Based on the outcomes of the reconnaissance studies, define potential projects, or if necessary, in-depth studies (which the District intends would be primarily funded by interested parties)
- 5) Define specific project(s) and begin implementation activities:
 - a. Pursue financing or funding partners;
 - b. Develop and execute MOUs and/or contracts;
 - c. Complete environmental studies (pursuant to CEQA);
 - d. Petition the State Water Resources Control Board to change the District’s water rights permit (required for options “b” and “c” and possibly some local water uses via option “a”)
 - e. Obtain permits;

During this next phase of Water Resource Planning work, the District will continue to provide numerous opportunities for stakeholder and community input, both formally (via public hearings) and informally like the District did during the community-planning phase.

9) Implementation Activities to Advance Top-Tier Options

9.1 Activities Common to All Options

9.1.1 Communication

Schedule briefings with local legislative representatives, agencies, stakeholders, tribes, and other parties who have an interest in the water-use options and/or may assist the District.

At the appropriate time, convene a series of “initial discussions” with key parties outside of Humboldt County to share: what we are trying to accomplish and why; water-use options under consideration; and for option “b” (transport) the process by which we will undertake consideration (e.g. issuance of an RFP vs. bilateral discussions vs. other process).

How the District communicates needs to be carefully crafted so as to protect the District and local interests, and preserve the process the District wishes to go through. This is especially true for consideration of options “b” and “c”.

9.1.2 Identify Resources to Support Evaluation

Table 1 presents potential partners with whom the District should consult, and potential grant programs the District should explore to support evaluation of the water-use options.

Table 1 – Potential Partners and Resources	
<p><u>Option A:</u> Local Sales</p>	<p>What support can local economic development professionals/organizations or the business community provide?</p> <p>Potential grant programs:</p> <ul style="list-style-type: none"> • Headwaters Fund • Economic development programs • Dept of Labor programs
<p><u>Option B:</u> Transport to another Municipality outside District</p>	<p>What support can the Harbor District, proponents of Short-Sea Shipping, local business, or economic development organizations provide?</p> <p>Potential grant programs:</p> <ul style="list-style-type: none"> • Headwaters Fund • Economic development programs (e.g. EDA) • Dept of Labor programs • Harbor or maritime programs • Department of Water Resource programs
<p><u>Option C:</u> Dedicating a portion of available water for in-stream flows</p>	<p>What support can Resource Agencies (NOAA-Fisheries, CDF&G, USF&WS, USFS), Humboldt State University, California Cooperative Fish & Wildlife Research Unit (at HSU), CalTrout or Blue Lake Rancheria provide?</p> <p>Potential grant programs:</p> <ul style="list-style-type: none"> • DFG’s Fisheries Restoration Grant Program • NOAA-Fisheries grant programs • Coastal Conservancy • Humboldt Area Foundation

9.1.3 Public Involvement

The District will continue to solicit input from the public and stakeholder groups over the coming years as consideration and evaluation of the water-use options advance. At some point in the future, the District may initiate another community-focused education and outreach effort, similar to that which occurred in 2008-09, but with a focus on implementation activities.

Additionally, the Board of Directors will accept public comments and input at numerous regular Board meetings as well as formal public hearings.

9.2 Subsequent Activities for each Option

Proposed implementation activities have been defined for each water-use option. They are organized into three time periods as follows:

- Short-term: Actions the District intends to take between March and December, 2011
- Medium-term: Actions the District intends to take between 2012 and 2015
- Long-term: Actions the District intends to take – and outcomes it hopes to achieve – in 2015 and beyond

Actions defined in the medium and long-term categories will be shaped and adjusted based on outcomes of prior-period work.

The proposed actions are presented in the following Implementation Matrix for each time period.

Water Resource Planning Implementation Matrix

Options	Short Term Actions (March – December, 2011)
<p style="text-align: center;">N/A – Activities Necessary for all</p>	<ul style="list-style-type: none"> ❖ Coordinate discussion of Urban Water Management Plan requirements with proposed water-use options ❖ Capital Improvement Plan <ul style="list-style-type: none"> ○ Finalize CIP to identify revenue requirements over time ○ Evaluate potential increase in water rates to support capital replacement projects ○ Identify revenues needed from outside sources to enable District to issue bonds for needed replacements
<p style="text-align: center;"><u>Option A:</u> Local Sales</p>	<ul style="list-style-type: none"> ❖ Write letter to retail water agencies in Humboldt County re: availability of water ❖ Write letter to local economic development organizations and Chambers of Commerce re: availability of water ❖ Initiate awareness campaign (including the media) ❖ Raise awareness and consult with regional and State economic development organizations
<p style="text-align: center;"><u>Option B:</u> Transport to another Municipality outside District</p>	<ul style="list-style-type: none"> ❖ Conduct a reconnaissance study to determine the feasibility of marine-based transport of water from Humboldt Bay. Determine volume capability, approximate time of travel to potential California markets, and a preliminary estimate of transportation costs. ❖ Develop a “term sheet” which outlines criteria under which the District would be willing to transfer water, e.g.: <ul style="list-style-type: none"> ○ Minimum price ○ Term (minimum/maximum) ○ Volume (minimum/maximum) ○ Water conservation standards (e.g., meet new 20% x 2020 requirements) ○ Environmental standards (e.g., addressing groundwater overdraft or providing fisheries benefits) ❖ Identify public agencies that have a need for additional water (e.g., those considering desalinization or suffering from reduced supply reliability) ❖ Initiate preliminary discussions with several (approximately three to five) potential purchasers for a combined total of 20 - 40 MGD

Water Resource Planning Implementation Matrix

Options	Short Term Actions (March – December, 2011) Continued
<p style="text-align: center;"><u>Option C:</u> Dedicating a portion of available water for in-stream flows</p>	<ul style="list-style-type: none"> ❖ Complete a Fisheries Restoration Program Grant (FRPG) application to establish a process and develop a plan that explores and evaluates the transfer of a portion of the District’s available water (e.g., 20 - 40 MGD, like in option B) for environmental benefit in the Mad River and estuary. (Note – This grant application was completed and submitted to the California Department of Fish and Game in March 2011. If approved funding would not be available until mid- 2012.) ❖ Convene a series of “scoping workshops” with Resource Agencies and other knowledgeable parties to define: <ul style="list-style-type: none"> ○ the regulatory and permitting requirements of an instream flow option; ○ potential benefits of a water transfer to the Mad River; ○ potential adverse biological or physical impacts of such a transfer; ○ beneficial or adverse effects to the estuary, and ○ studies that would need to be done to determine benefits and effects. ❖ Define District Operations and what that “Means for the River” <ul style="list-style-type: none"> ○ Baseline: post-construction of HBMWD’s regional water system, and operation with one or two mills (which is the operating mode addressed in the District’s Habitat Conservation Plan) ○ Potential changes in flow release operations. Develop these such that they relate to species of interest and their life cycle stages. Consider: <ul style="list-style-type: none"> ● late fall/early winter when Ruth is filling; ● winter, and most often spring, when Ruth Lake is full and spilling (note – operational changes are not possible at this time); ● summer and fall – can consider: <ul style="list-style-type: none"> ○ additional increment every day vs. ○ additional increment at certain times for certain duration

Water Resource Planning Implementation Matrix

Options	Medium-Term Actions (2012-2015)
<p style="text-align: center;"><u>Option A:</u> Local Sales</p>	<ul style="list-style-type: none"> ❖ Continue conversations with local economic development agencies/resources (but recognize not likely to “bear fruit”) ❖ Assess likely effectiveness of advertising the availability of water in trade journals, the newspaper or via the internet ❖ Begin conversations with interested parties/stakeholders regarding additional use of water ❖ If nothing appears to be materializing, assess likely effectiveness and cost of a “business attraction” effort. If District decides to proceed, partner with appropriate agencies and organizations
<p style="text-align: center;"><u>Option B:</u> Transport to another Municipality outside District</p>	<ul style="list-style-type: none"> ❖ Negotiate MOU(s) with one or more purchasers for feasibility and environmental studies (it is the District’s intent that interested parties would pay for most if not all of the study costs) ❖ Complete feasibility study for transfer(s) which assesses viability, economics and environmental effects ❖ Depending on outcomes: <ul style="list-style-type: none"> ○ initiate environmental document and permitting activities ○ negotiate additional MOU(s) or option contract(s)
<p style="text-align: center;"><u>Option C:</u> Dedicating a portion of available water for in-stream flows</p>	<ul style="list-style-type: none"> ❖ Complete activities defined in and funded by FRGP grant, and develop an Instream Flow Option Study Plan ❖ Create a Technical Review/Advisory Team and staff it with the appropriate resource specialties based on the outcomes of the assessment work and recommended studies in the Instream Flow Option Study Plan ❖ Apply for another FRGP grant (or secure other funding) to conduct the necessary studies and assessment work ❖ Conduct studies and assessment work and determine conclusions, outcomes and recommendations ❖ Based on outcomes, if enhancement or restoration activities on the Mad River are feasible: <ul style="list-style-type: none"> ○ negotiate an MOU with Resource Agencies or other appropriate parties to define preferred approach ○ explore potential and seek revenues for a transfer of water for in-stream purposes ○ initiate environmental document and permitting activities

Water Resource Planning Implementation Matrix

Options	Long-Term Actions (2015 plus)
All	<ul style="list-style-type: none"> ❖ Coordinate discussion of Urban Water Management Plan with water use options ❖ During this time period, the District intends to put up to 50 MGD of water to “beneficial use” pursuant to its water rights permits. The options below present possible ranges of water use, the total of which will not exceed 50 MGD.
<u>Option A:</u> Local Sales	<ul style="list-style-type: none"> ❖ Continue medium-term actions ❖ Develop new demands for raw water: <ul style="list-style-type: none"> ○ 5 MGD by 2020 ○ 10 MGD by 2029 <p>(Note - these demands reduce the amount of water that would be transferred via Options B and C)</p>
<u>Option B:</u> Transport to another Municipality outside District	<ul style="list-style-type: none"> ❖ Finalize environmental documents and permitting activities (resulting in issuance of permits for transfers) ❖ Execute transfer agreement(s) ❖ Issue bonds/other financial instruments based on revenues from water transfer(s) ❖ Construct necessary infrastructure ❖ Initiate transfers (pending status of local sales, goal is to transfer up to 40-50 MGD, this quantity in concert with environmental transfer pursuant to Option C) ❖ Continue transfers through SWRCB license period: <ul style="list-style-type: none"> ○ through 2035 for State Water project contractors ○ through 2045 for Central Valley Project contractors
<u>Option C:</u> Dedicating a portion of available water for in- stream flows	<ul style="list-style-type: none"> ❖ Finalize environmental documents and permitting activities (resulting in issuance of permits for transfers) ❖ Initiate transfer (pending status of local sales, goal is to transfer 40-50 MGD, this quantity in concert with transfer pursuant to Option B) ❖ Continue transfers through SWRCB license period and probably for some period beyond 2029

Water Resource Planning Implementation Matrix