

Humboldt Bay Municipal Water District

Water Resource Planning

A Community-based Planning Process to Address an
Important Water Resource Issue Facing the HBMWD
and our Community



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Humboldt Bay Municipal Water District Water Resource Planning Process

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HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Water Resource Planning

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I) INTRODUCTION – Overview of the District

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 to provide a reliable supply of drinking and industrial water to customers in the greater Humboldt Bay area of Humboldt County.

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 Ruth, 3) diversion, pumping and control facilities on the Mad River between Arcata and Blue Lake in Humboldt County, 4) storage and treatment facilities at various locations, and 5) two separate and distinct pipeline systems which deliver treated drinking water or untreated raw water to the District's customers throughout the Humboldt Bay region.

The District operates almost exclusively at the wholesale level. The District supplies treated drinking water on a wholesale basis to seven Municipal agencies in the greater Humboldt Bay region. The District's wholesale Municipal Customers are: the City of Arcata, the City of Eureka, the City of Blue Lake, the Fieldbrook-Glendale Community Service District (CSD), Humboldt CSD, Manila CSD, and McKinleyville CSD. Via this wholesale relationship, the District serves water to an estimated population of 75,000 to 80,000 people. The District also supplies untreated, "raw" water to customer(s) located on the Samoa Peninsula for industrial purposes. Wholesale service to these customers – both municipal and industrial - is governed by long-term water supply contracts.

The District has water rights from the State (additional details regarding these rights later) and physical system capacity to reliably supply 75 Million Gallons per Day (MGD) of water.

The District operates and maintains two separate and distinct water supply and delivery systems as follows:

- An Industrial Water System, capable of supplying 60 MGD, which serves wholesale industrial customer(s) located on the Samoa Peninsula.
- A Domestic Water System, capable of supplying 20 MGD of treated drinking water, to the seven wholesale Municipal Customers.

Following are several key points regarding the District's infrastructure which will be helpful to understand in regards to a proposed planning process which will be presented later:

- These two systems are in place, have been fully paid for, and have reliably, and cost effectively served the drinking and industrial water needs of our community since the early 1960s.
- Given the capacities noted above, 75% of the District's water supply and delivery capacity is in the industrial water system.
- These systems are *dedicated* for their respective uses - in other words the industrial system cannot supply drinking water to our community. So although the District has ample water supply available and under permit from the State, the District is currently limited to providing approximately 20 MGD of drinking water, absent significant infrastructure additions on the Domestic Water System.

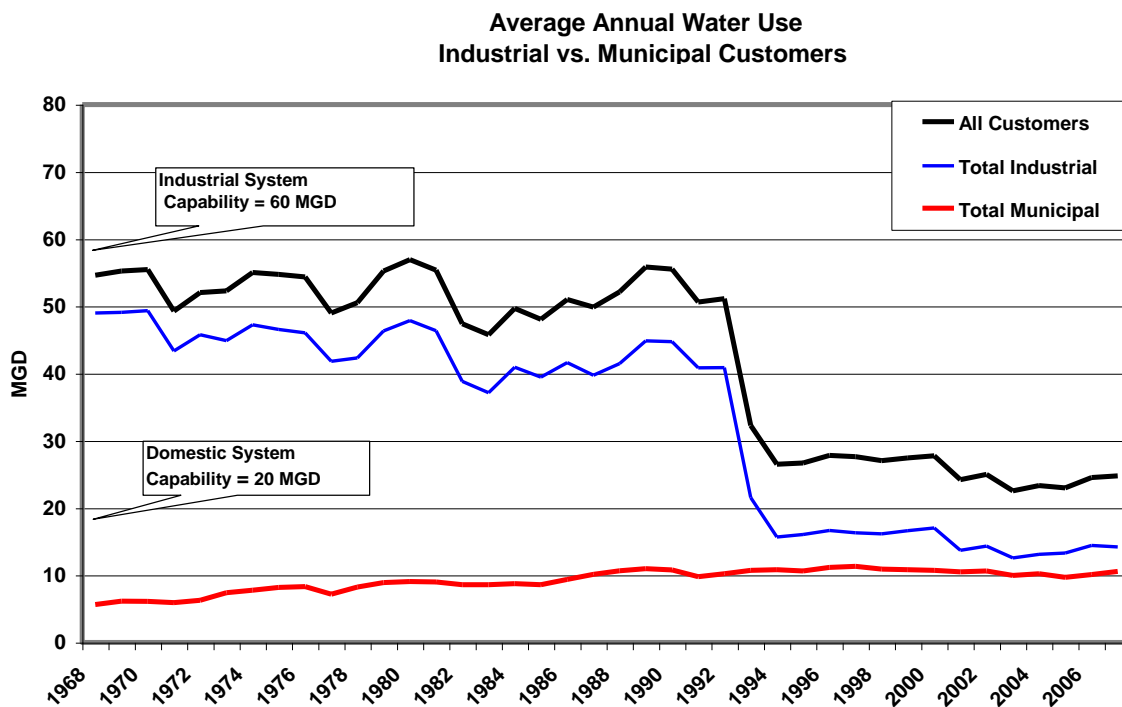
II) KEY CHALLENGES FACING THE DISTRICT

From the early 1960s until 1999, the District had long-term contracts in place with two large industrial users (pulp mills) on the Samoa Peninsula. For most of this period, the full 60 MGD capacity of the District's Industrial Water System was under contract to these mills. During this period, the two mills used most of the water under contract to them. The mills' actual use ranged between 40 and 50 MGD, which was *4 to 5 times greater* than the *total* Municipal use for the entire Humboldt Bay region.

However, in the mid-1990s, the Simpson Pulp Mill ceased operation, resulting in a significant reduction in District water deliveries and use. Additionally, by the mid-2000s the one remaining operational pulp mill reduced its contract commitment and use to half of what it had been historically.

Following is a graph showing the annual average total Municipal versus Industrial water use over the past 40 years. As reflected in the graph, total Municipal use has been quite constant over the last twenty years averaging about 10 MGD. However, total industrial use has dropped significantly from 40-50 MGD to about 15 MGD today.

In summary, only one quarter (15 MGD) of the District's industrial system capacity is



currently being utilized. This under-utilization has created several significant issues for the District and its wholesale customers. It has triggered a significant cost increase to the remaining wholesale customers (the one remaining mill and seven Municipalities), and it has created a very unique challenge with respect to the District's water rights.

Each of these impacts is discussed in greater detail in the appendices. Appendix 1 discusses the significant wholesale cost increases which occurred over recent years and the resulting impacts on retail water rates. Appendix 2 addresses implications with respect to the District's water rights.

III) Planning Process to Address Longer-Term Issues

The Board of Directors of the Humboldt Bay Municipal Water District recently embarked upon a planning process aimed at addressing important *longer-term* interests and issues of the District. The primary reason for taking a longer-term focus is to ensure the integrity and viability of the regional water system and associated water supply are maintained, such that the District can continue to meet its important service mission to our community.

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.

Through this planning process, the Board has identified two top priority issues to address over the next few years. They are Infrastructure Planning and Water Resource Planning. Each is briefly introduced below, followed by a more detailed proposal regarding water resource planning.

Infrastructure Planning

Infrastructure planning is very important given the critical role infrastructure plays regarding the District's ability to meet its mission and reliably supply water to our wholesale customers, and therefore, the community. A comprehensive and concerted infrastructure planning effort is important now because most of the District's infrastructure is 50 years in age, and will be *very* costly to replace.

The District has already initiated work in this area. In the fall of 2007, the District completed, and the Board of Directors approved, the first-ever "Infrastructure and Capital Improvement Plan" for the District. The purpose of this Plan is to lay the groundwork to begin to address the very costly infrastructure replacements and improvements that will be necessary on the regional water system over the next twenty years.

The Plan introduces a policy framework to guide the Board and staff in this complex endeavor. The Plan also defines a prioritization process and specific ranking criteria to prioritize individual infrastructure projects. The ranking criteria include estimated “Remaining Useful Life” of an asset, whether there is “Redundancy” so if the asset fails service can continue, and a series of factors that define and differentiate “Importance” of the asset. The Plan contains a detailed inventory of all District assets/infrastructure. District staff are currently in the process of assessing the condition of these assets and “running them through” the project ranking methodology defined in the Plan. The District hopes this assessment and prioritization work will be completed in the next 12-18 months, at which time the District will publish "Version 2" of the Plan. “Version 2” will include asset specific details with proposed timeframes for key regional infrastructure projects.

The Plan was shared with the District’s eight wholesale customers at the end of 2007. Discussions at the staff level have already been initiated with respect to financing mechanisms and implementation. The District will work in partnership with its wholesale customers prior to and during implementation, especially in regards to community education.

Water Resource Planning

Water resource planning is also of critical importance given the loss of the industrial customer base, and the resulting impacts of increased customer costs and under-utilization of the District’s water rights (as introduced above in Section II and explained in greater detail in Appendices 1 and 2). It is of utmost importance to address this issue to ensure HBMWD’s maintains its water resource for the long-term benefit of its wholesale customers and the community.

In early 2007, HBMWD’s Board expressed interested in initiating a process whereby the District’s wholesale customers, key stakeholders, and interested members of the public would be invited to learn about this important issue and provide input to the District. To that end, the Board created an ad-hoc committee to explore options for stakeholder and community input, and to develop a proposal for the Board’s consideration regarding what such a process might look like. Director Kaitlin Sopoci-Belknap, Director Randy Turner and General Manager Carol Rische were assigned to this committee.

IV) Water Resource Planning

a. Pre-Work by Ad-Hoc Committee

The ad-hoc committee initiated a series of meetings with community stakeholders to listen and gather input on processes to educate and involve stakeholder groups and the public in general. The committee was interested in hearing about community-involvement processes that other agencies or organizations have done, especially those they viewed as successful. Of particular interest, was “what made them successful?” The committee also collected any initial ideas the stakeholders offered with respect to opportunities to market water locally.

By no means were these initial meetings intended to be exhaustive or all-inclusive. Rather, they were intended to reach a reasonable cross-section to gather ideas and learn what has worked well. Introductory meetings were held with the following people:

- Zuretti Goosby and Connie Stewart, local representatives of State legislators
- Mark Wheetly, CA DFG, and Arcata City Council Member who serves on HBMWD’s Water Task Force
- Kirk Girard and Jacqueline Debets, Humboldt County Community Development Department
- Kathy Moxon, Humboldt Area Foundation
- J Warren Hockaday, Eureka Chamber of Commerce
- Madelin Holtkamp, Redwood Region Economic Development Commission
- David Hull, Humboldt Bay Harbor, Recreation and Conservation District
- Melanie Williams, Redwood Community Action Agency
- Greg King, North Coast Environmental Center
- Pete Nichols, Humboldt Baykeeper
- Mark Lovelace, Humboldt Watershed Council

The committee attempted to meet with a representative of the Blue Lake Rancheria but they were not available at this time.

The committee heard many ideas and received valuable input. Following is a summary of the key points organized by theme:

Regarding Timing:

- Very good time to discuss this issue since no proposal is “on the table”

Regarding Community Education:

- This effort should include education of the public. Most people do not understand why the District was formed and the critical role (and financial contributions) of the two mills. The public does not understand the adverse impacts of losing the mill. The entire community benefited from the contributions of those mills - maybe the entire community needs to bear the cost of having lost that industrial base (Brownfield analogy given)
- Use traditional media to help educate and get key messages across (Op-Ed columns, “guess what” corner, 15 minute radio shows, etc.)
- Develop a continued and consistent message. Make it tangible (use pictures, visual aides and develop a “sense of place”)
- Do this public process in the context of broader public education and outreach (e.g. exhibit at the Discovery Museum, school programs, structured lecture series, etc)

Regarding Marketing and Business Attraction:

- The District should get more involved in marketing, but don't go down the path of a “business attraction model”. One can spend a lot of money with little to show for it. Our area has unique challenges and constraints which are not adequately factored into traditional business attraction models.
- The availability of water alone is not likely to be something that actually attracts businesses to our area given the key constraints and limitations which disadvantage our region (airport, highway and digital capacity for example).
- Work with and support agencies that have land-use planning authority to get appropriately zoned land ready to support business development. We should be focusing on coastal dependent areas with infrastructure and water availability (e.g Samoa Peninsula). Leverage work already done by the County, the City and Eureka and the Harbor District (e.g. Harbor Revitalization Study and related efforts)

- Convene a number of successful local business people who may have connections or innovative ideas (examples: Humboldt Creamery, Loletta Cheese, Sun Valley Floral Farm, World Water Hydroponics, Healthware Solutions Software)
- Have an in-depth discussion with people and businesses on the Samoa Peninsula regarding needs and opportunities
- Make sure we understand what our local needs are (gather data and develop projections). What do local businesses need? What do other Districts/agencies need? Address not only the needs of existing businesses but new businesses that may want to relocate here.
- Put this local issue in the broader context of regional and statewide issues.
- Take water transport “off the table.” Do not use fear tactics regarding the potential loss of water rights – that will be polarizing. Rather focus on opportunities to market the assets and resource.
- Keep the opportunity for water transport on the table if that can be done under our terms and for specific benefits locally. Should at least look at transport since no proposal is on the table right now
- Consider legislative solutions too, especially since water issues are front and center right now

Regarding Process to Involve Stakeholders/Community

- Learn from the State’s recent Health Care Initiative process. It was an innovative way to involve a lot of people. However, many expressed frustration regarding the limitation to comment on two pre-defined alternatives. The audience apparently did not understand that and wanted to provide broader input. Key advice - be clear at the outset regarding how the public will be involved and what advice is sought.
- Look to partner with entities who would naturally be “conveners” (e.g. HSU, Humboldt Area Foundation, North Coast IRWMP)
- There are good examples of community involvement processes in the land-use planning area (Sacramento COG using You (or U) Plan software and land-use planning summit in Utah). Are there water planning software packages along these lines?

- Recommend use of an ad-hoc Citizen Advisory Committee. This may help get buy-in from certain groups (shellfish technical advisory committee given as a positive example)
- Another example given in which a community advisory committee was used was for the Harbor District's recent effort to update its Strategic Plan. The committee was comprised of 8 members (two Commissioners and six public members from various stakeholder groups). Specific areas of interest were defined by the advisory committee (harbor, recreation, conservation, government) and input was sought by the advisory committee on each topic from a series of facilitated community meetings. Lessons learned: define what the process is intended to accomplish, and really listen during the input sessions.
- Many process suggestions were provided:
 - An experienced and capable facilitator is essential
 - Start off by bringing everyone up to some level of understanding. Define the landscape ("we have this water and it's got to be used")
 - It's important to define, and "get right," the questions we are asking at the outset. Don't allow it to be too open-ended.
 - Define the process to deal with concerns, not just ideas
 - Consider scenario planning. That may be a good place to start, followed by a community-based process to provide feedback on the possible scenarios
 - Think carefully about who needs to be invited. Make sure groups we may not naturally think of are included (On whom would the negative impact be the greatest? Who cares if water rates go up?)
 - Define the "criteria" by which the District should evaluate any decision. The criteria should be value-based and help define desired outcomes. Examples of criteria might be: don't lose control of the water rights, don't adversely impact fisheries on the Mad River, provide ratepayer benefits, etc. Once the criteria are developed, brainstorm options and ideas, and evaluate the ideas against the criteria.

b. Ad-Hoc Committee Recommendation

The ad-hoc Water Resource Planning committee recommended that the District embark upon a process whereby the District's wholesale customers, key stakeholders, and interested members of the public are invited to learn about this issue, and participate in a collaborative process to provide input to the District. The committee suggested the process be designed to collect input in several areas as follows:

- important factors, or values, that stakeholders and the community would like to see in regards to outcomes;
- ideas or avenues to increase utilization of the District's industrial water system via local sales;
- other ideas or avenues with respect to increasing "beneficial use" of water under permit; and
- input regarding factors to consider regarding difficult decisions or trade-offs the District may at some point have to make regarding this issue.

On March 14, 2008, the Ad-hoc Committee presented its recommendation to the Board of Directors at their "planning study session." After much discussion and thoughtful deliberation, the Board endorsed the recommendation in principle, and decided to take the next steps in this important planning process.

c. WRP – Next Steps to Implement

In June 2008, the Board of Directors engaged Mary Gelinis (Gelinis-James Inc) to assist them in developing a process whereby stakeholders and interested public would first learn about, and then provide input to, the District on this very important issue. In this process, the Board is interested in trying new techniques (and hopefully serving as an early role model) to improve civic dialogue and public participation, thereby, increasing awareness and understanding of this issue and engendering greater trust and better outcomes.

In October 2008, the Board agreed on the following key elements of this planning process:

- Desired Outcomes
- Desired Characteristics

- A six-phase approach:
 - Set the Stage
 - Education
 - Develop Criteria and Guiding Principles
 - Generate Options
 - Evaluate Options
 - Agree on Recommendations

Appendix 5 contains a detailed description of the Water Resource Planning process, including the Desired Outcomes, Desired Characteristics and proposed activities in each phase.

The Board has completed most of the work in Phase 1 - "Set the Stage." The final step – preliminary education and outreach and formation of an Advisory Committee - is about to commence. On December 1, 2008, the District will meet with its wholesale water customers (via the Water Task Force) to officially introduce and launch this important planning effort with them. Following that, education and outreach will occur to a number of stakeholders/interested parties.

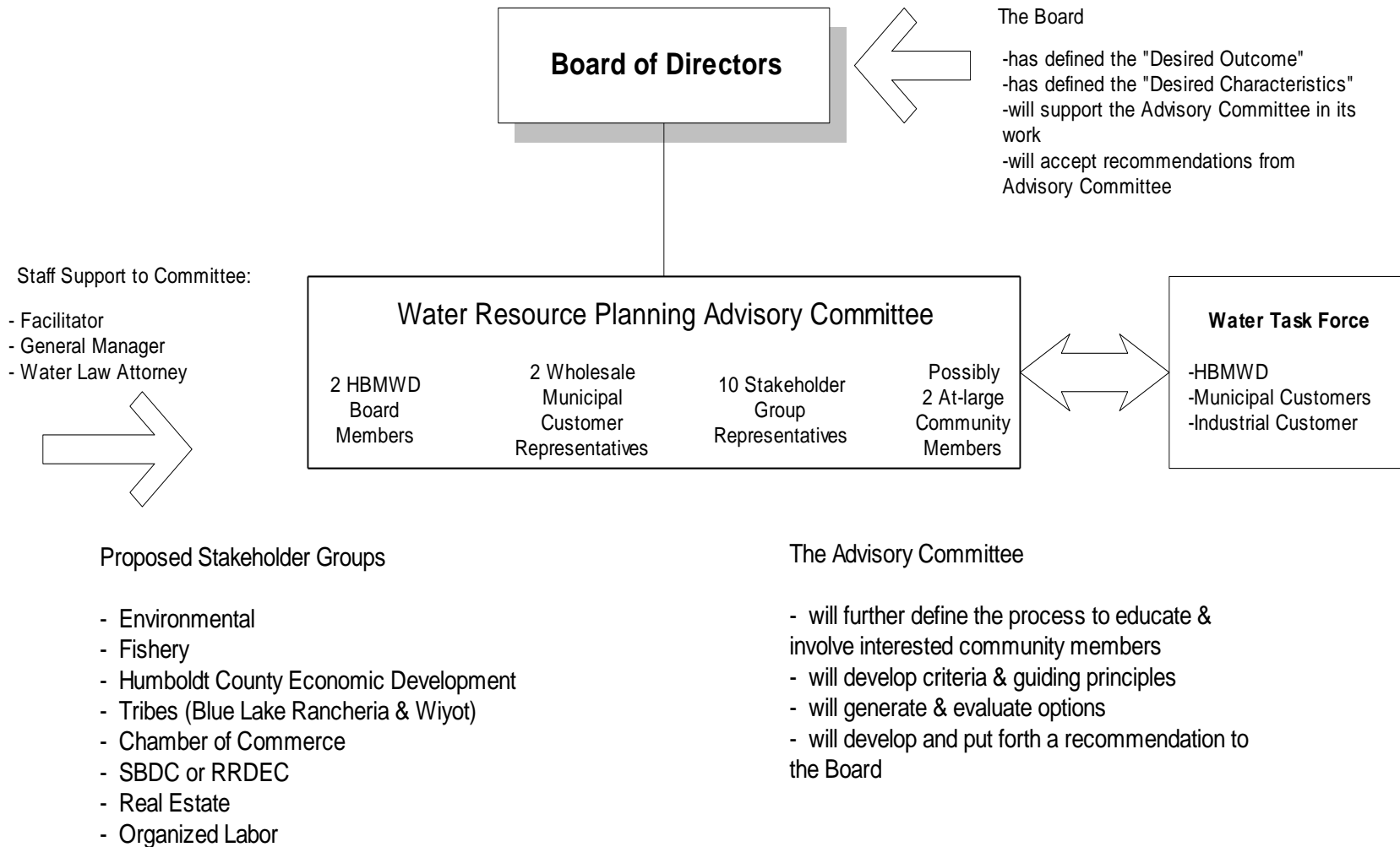
As introduced above, an Advisory Committee will be formed, the purpose of which is to:

- Educate stakeholders and interested members of the public regarding this important issue facing HBMWD and its implication for our community;
- Gather input from stakeholders and the public regarding HBMWD's water resources;
- Generate and evaluate option; and
- Develop recommendations for HBMWD's Board of Directors.

The following page summarizes the role of the Advisory Committee and its relationship to the Board of Directors as well as its proposed composition. Appendix 6 contains the Advisory Committee Charter which presents much greater detail about this committee, its purpose and function. Following formation of the Advisory Committee and completion of the "Education" phase, work to address HBMWD's water resource issue will commence (Phases 3 through 6 of the process). Communication vehicles will be developed by the Committee once it is up and running.

Humboldt Bay Municipal Water District

Water Resource Planning Advisory Committee



HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Water Resource Planning

APPENDICES

MATERIAL REGARDING HBMWD's ISSUES

- 1) Key Challenges Facing the District and its Customers – *Increased Wholesale Water Costs and Retail Water Rates*
- 2) Key Challenges Facing the District and its Customers – *Utilization of Water Rights and Maintaining Local Control*
- 3) “Future Water Use by Industrial Water Users in Humboldt County” by Parson Brinckerhoff. This report builds upon their earlier work – the Harbor Revitalization Study – which was commissioned by the County of Humboldt, the City of Eureka and the Humboldt Bay Harbor, Recreation and Conservation District
- 4) “Water Rights and Transfer Questions” report prepared by Bill Spruance (Minasian, Spruance, Meith, Soares & Sexton) and Paula Whelan (Wagner and Bonsignore) which was requested by HBMWD and its seven wholesale Municipal Customers

MATERIAL REGARDING PLANNING PROCESS

- 5) Water Resource Planning Process – overview of the process (Desired Outcomes, Characteristics of the Process, Summary of Six Phases)
- 6) Advisory Committee Charter
- 7) “Meaningful Public Conversations: Essential Principles and Practices for Strengthening Collaboration in our Communities” by Mary Gelinias, Ed.D. and Roger James, Ed.D.