



**State of Rhode Island and Providence Plantations
Water Resources Board**

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RHODE ISLAND WATER RESOURCES BOARD

MINUTES OF BOARD MEETING # 473

May 20, 2008

Members Present:

William Penn, Chairman
Pamela Marchand, Vice Chair
Daniel W. Varin
Frank Perry
William Stamp, III
Richard Mignanelli
Jesse Rodrigues, Jr.
Bill Parsons*
June Swallow*
Mike Sullivan

Staff Present:

Juan Mariscal, General Manager
Kathleen Crawley
Romeo Mendes
Beverly O'Keefe
William Riveroso

Members Absent:

Ian Morrison
Harold Ward
Robert Griffith*

Guests

Alicia Good-DEM OWR
William Nunnery - Maguire
Krista Moravec - Maguire
Bryan Weiner - Maguire
Ames Colt – RI BRWCT
James DeCelles – Pawtucket Water
Eugenia Marks – Audubon Society
Henry Meyer - RIWWA
Tom Tilas – Metcalf & Eddy
Matt Wojak – Office of the Governor
Heidi Green - QDC
Alisa Richardson - RIDEM
Robert Breault - USGS
Sue Licardi - NKW
Russ Chatenau - RIDEM

*Member designee

Call To Order

Chairman Penn called the meeting to order at 11:35 p.m. noting that a quorum was present.

Presentation and Discussion: Supplemental Water Supply Study Overview & Big River Groundwater Development Project

Mr. Penn introduced the item. Mr. Mariscal noted that included in the water study Maguire Group has evaluated where we are going to get water in the future from the various systems and the role Big River will play. He introduced Mr. Nunnery of Maguire Group. Mr. Nunnery proceeded with the presentation which included highlights as follows:

- The Phase I Study project focused on the Providence water system and a lot of work was done to identify risk of catastrophic failure particularly to the treatment plant and reservoir.
- The study identified significant needs for supplemental water if the supply was lost for an extended period of time.
- In Phase II of the study, the remaining 24 water suppliers were divided into five regional study areas based on interconnections and then evaluated based on inventory, well capacity, surface water capacity, infrastructure capacity- all vetted with the suppliers.
- Emergency needs are studied and presented hardship thresholds on two levels:
 - for a term of three to six months reducing residential use 30 gallons per capita per day (gpcpd) and commercial/industrial use by 20%.
 - for one to two years reducing residential use to 45 gallons per capita per day (gpcpd) and commercial/industrial use by 20%.
- Review of a build out scenario and calculations for emergency demand.
- Review of surplus water calculations including failure scenarios.
- Review and identifying larger regional needs and potential solutions such as wheeling surplus water, rehabilitation of inactive wells, limited new well development and cost analyses of developing desalination alternatives.
- Review of cost scenarios to develop/operate wells at certain volumes including Big River wells.
- For the Big River Well Scenario:
 - Potential design (firm) capacity of treatment plant in Big River is 4.2 mgd.
 - The consultants began with the MM-O9 scenario that was part of the US Geological modeling work conducted for the Board and has been the starting point for the Board in developing the groundwater wells. The scenario included 5 wells in the Big river Basin
 - Elimination of the groundwater wells South of Route 95:
 - Eliminates the two wells that most severely limit pumping in the summer due to streamflow impacts
 - Reduces distance and associated development and operational costs

Mr. Stamp asked for clarification regarding the scenario (MM-O9). Ms. Crawley explained that this scenario sought to maintain a minimum monthly flow standard based on ABF (Aquatic Base Flow) in the limiting month (September) for the wells identified in the study. Mr. Stamp stated that he recognized this is a limiting factor.

Mr. Mariscal discussed background information, details and questions of policy as they relate to the Business Plan that is being assembled for the RFQ/P for the Big River Project. He pointed out there is a lot to be done on this project that will require Board policy as well as procedural decisions.

Mr. Penn reviewed the total cost of water schedule on page 22. He noted the cost of \$2.31 per thousand gallons for alternative 1. Mr. Stamp questioned the assumptions noting potential unforeseen energy costs.

Discussion ensued regarding assumptions and cost factors and how they were derived.

Mr. Varin asked what power assumptions were used for the reverse osmosis [i.e. desalination] plant. Mr. Nunnery replied off the grid at 15 cents per kwh.

Mr. Meyer noted capital costs should consider transmission lines, infrastructure replacement costs and staffing costs to operate 24/7. Mr. Penn asked Mr. Meyer if the RIWWA could examine the report and provide feedback that may need to be factored in to this study.

Mr. Penn concluded this report is information the Board needs so we as a Board can start moving forward on developing the groundwater in Big River. He asked the General Manger if we are ready to issue the RFQ/P. Mr. Mariscal stated yes but there are a few little pieces that need to be resolved including budget issues, funding of the RFP and legal aspects. He added it should be determined where the water is going to go. He pointed out there was an expectation of the state that water provided from Big River would be a revenue generator but these projects have costs and any revenue wanted by the state would have to be added to the costs. He stated this project should not only be a supply project but a water use, efficiency and conservation project.

Ms. Swallow left at 12:20 pm.

Mr. Sullivan requested an electronic version of the presentation.

Mr. Penn thanked Mr. Mariscal for pointing out the challenges ahead. Mr. Penn stated that it is time to move forward and get the request for proposals out. Mr. Penn polled the members and the consensus was to get it out, get the process moving but give the responders time to respond. Mr. Penn asked staff to move forward and asked all interested parties to review the product and forward final comments.

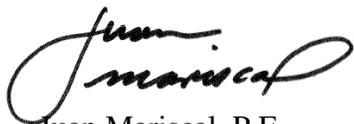
Mr. Mariscal suggested reconvening the Big River Ad Hoc Committee. Mr. Sullivan suggested that the Committee reconvene within thirty days. Mr. Penn agreed and stated we should plan to get the RFQ/P out the door by July 1st, 2008.

The Ad Hoc Committee meeting was scheduled for June 16, 2008.

ADJOURNMENT:

Motion by Ms. Sullivan second by Mr. Varin to adjourn the meeting. The vote in favor was unanimous. The motion carried. The Board meeting ended at 12:57 pm.

Respectfully Submitted,



Juan Mariscal, P.E.
General Manager

Note: The complete proceedings of this meeting are available on audiotape by request. In addition, the presentation by Maguire Group is also available by request.