

Minutes of the March 9, 2000 Meeting of the Coastal Bend Regional Water Planning Group for the Senate Bill 1 Regional Water Planning Program for Region N

This meeting of the Coastal Bend Regional Water Planning Group (Coastal Bend RWPG) was held in the auditorium at the TAMU Research and Extension Center, 10345 Agnes Street, Corpus Christi, Texas 78406. Judge Josephine Miller called the meeting to order at 1:34 p.m.

Voting members of the Coastal Bend RWPG in attendance included Judge Josephine Miller, Mr. Robert Kunkel, Dr. David McNichols, Mr. Billy Dick, Mr. Bobby Nedbalek, Mr. Greg Carter, Mr. Jerry Kane, Mr. Scott Bledsoe, Dr. Patrick Hubert, Mr. Bernie DeLaune, and Ms. Carola Serrato.

Non-Voting members of the Coastal Bend RWPG in attendance included Mr. Robert Flores, Mr. Vincent Guerra, Mr. Dexter Svetlik, Mr. Jim Tolan, and Mr. Robert Fulbright.

Minutes from the January 20, 2000 meeting of the Regional Water Planning Group for the Senate Bill 1 Regional Water Planning Program for Region "N" were reviewed. Mr. James Dodson requested a modification of the minutes to correct quoting inaccuracies. Corrections to the minutes were to be made on page 3, paragraph 2, concerning groundwater allocation: Replace Dr. Hubert to Mr. Kunkel; Mr. Carter replaces Mr. Bledsoe; Mr. Hubert replaces Mr. Carter. After corrections were highlighted, Judge Josephine Miller made a motion to approve the minutes as corrected. The motion was seconded by Mr. Bernie DeLaune and then approved by a unanimous voice vote.

Judge Miller introduced Agenda Item IV: Election of Officers. Ms. Serrato moved to adopt the same slate of officers and executive committee members. Mr. DeLaune seconded the motion. Judge Miller then proceeded to ask three times if there were any other nominations. Hearing none, Judge Miller asked for a voice vote. The motion was approved unanimously.

Judge Miller introduced Agenda Item V: Appoint Advisory Panels on Unique Stream Segments, Reservoir Sites, and Public Involvement. Mr. Dodson referred to a memo in the agenda packet concerning the creation of two panels; one in conjunction with unique stream segments and reservoir sites, and another panel concerned with public involvement. Mr. Dodson requested the appointment of members for an advisory panel on Unique Stream Segments and Reservoir Sites and for volunteers to assist in various public meetings. Mr. Dodson stated that Mr. Tolan and Dr. Prouty already agreed to serve on the advisory panel (for Unique Stream Segments & Reservoir Sites) but that other members are needed. Mr. Carter asked a question concerning involvement. Mr. Dodson said that a few meetings over the next several months were all that were anticipated. Mr. Dodson noted that Texas Parks & Wildlife has invested a lot of time and energy in developing recommendations for unique stream segments. He also noted that the panel, like the Coastal Bend RWPG, would have to post notice of meeting times. Volunteers included Billy Dick, Dexter Svetlik, Carola Serrato, and Bernie DeLaune.

Judge Miller introduced Agenda Item VI: Approval to submit chapters 3 and 4 of the draft Regional Water Management Plan to the Texas Water Development Board (TWDB). Mr. Dodson introduced Kelly Payne to give a status report on the development of those two chapters and for any input/comments. Mr. Payne indicated that the draft sections of chapters 3 and 4 would be mailed out to be reviewed by Coastal Bend RWPG members and returned by the end of March. He asked members to review and provide comment on those options within the next two weeks. Mr. Payne stated that the draft report is due at the end of September but must include a 30-day public comment period.

Mr. Payne noted that Garwood is now included as a supply option. Mr. Payne next discussed the water supply forecast for 2050; Lake Corpus Christi, Choke Canyon, and Lake Texana (Garwood Included) contribute 246,900-acre feet/year. Other surface water rights in the Nueces Basin add another 8,500-acre feet/year. Finally, groundwater resources from the Gulf Coast Aquifer contributes another 72,900-acre feet/year (85,000 acre-feet/year including Carrizo-Wilcox). Mr. Payne noted the total supply of the system to be roughly 340,700 acre-feet /year in 2050 including factors such as sedimentation of reservoirs.

A question was asked concerning demand projections in 2050. Mr. Payne stated that demand is estimated to be about 310,000 acre-feet/year. Duval, San Patricio, Brooks, Kleberg, Jim Wells, Live Oak, and Nueces counties are estimated to have shortages of municipal water supply by 2050. Mr. Payne stated that shifting water between user groups is also an option in counties with a surplus of industrial supply. A comment was made concerning extended or record drought occurrences in relation to 2050 projections. Mr. Payne indicated that a projection of future water supplies is based on historical drought data.

A question was asked concerning a supply deficit in Kingsville. Mr. Payne stated that Kingsville uses the surplus water from somewhere else (Corpus Christi). He adds that Kleberg county has 2,618 acre-feet of water in mining based on 1994 data (the demand in 2050 for mining is zero). That 2,618 acre-feet can be applied to the shortage (1,200 acre-feet in the municipal sector) in Kleberg County as a management decision but are not reflected in current estimates.

Judge Miller questioned the degree of stream usage now compared to the future. She also expressed concern in using previous drought information stating that the current drought is more severe than droughts in the 30's and 50's. Mr. Dodson stated that one of the responsibilities of the Coastal Bend RWPG is to make policy recommendations and to provide a mechanism to get those recommendations to the legislature before the next session.

Mr. Payne next discussed Agenda Item VI: Water Supply Management Strategies. Mr. Dodson stated that within the next two meetings, information on the strategies will be available for review and discussion on implementation of those strategies. Mr. Kane next brought up discussion of the "doomsday" chart from HDR Engineering. Mr. Kane questioned whether a supplemental index could be added in the case that historic data is irrelevant to water supply projections. A correction was made concerning the date of meeting for the Senate Natural Resources Interim Committee hearing; the new date is June 29, 2000. Mr. Kane proposed a joint luncheon between Coastal Bend RWPG and the interim committee. He also encouraged the attendance of a TWDB meeting in April in Kingsville.

Mr. Dodson next opened discussion on the organization of policy recommendations. Mr. Payne discussed putting projects online as needed and the impact of the most recent drought of record (1996). He states that hydrology is not an exact science and therefore plans must be made based on historical records. Mr. Dodson discussed how the projected yield of Choke Canyon was inaccurate requiring planning studies for additional water supplies. He noted that it was not only the drought that changed the figures, but rather a multitude of factors including better modeling. Mr. Payne noted some water supply shortages that exist; manufacturing/steam electric in San Patricio, mining and irrigation shortages in Duval county in 2050. Mr. Payne next introduced some engineers from HDR: Brett Goodman, and Dave O'Rourke, who would be presenting information on the water supply options later in the meeting.

Mr. Dodson introduced Agenda Item VII: Public Participation. Mr. Dodson introduced Tom Brown from Naismith Engineering to discuss public participation issues such as dates and locations of meetings as well as feedback on presentations. Mr. Brown first discussed the process of holding public meetings, including educating people and allowing for comments. Topics of discussion that would be relevant to the public would be population estimates and shortages of water supply. Mr. Brown suggested meetings begin with an introduction and a provided agenda of that meeting for the public. Water supply planning should then be discussed followed

by closing remarks. He suggests a description of the water planning regions and any interactions between water planning regions.

Mr. Brown next suggested discussing the status of the current drought and the need to discuss conservation plans, adopted by TNRCC, for cities and water districts (many of which have not been approved yet) as well as the regional water conservation plan. He states that conservation starts with looking at ways to maximize efficiency of use within the system, maintaining per capita water use at 10% below the state average, increase the reuse and recycling of water, and conservation friendly rate structure. Mr. Garaña stated that one of the biggest users of water is the distribution system itself. A question was asked whether desalination would be discussed as being a water supply option. Mr. Brown replied by saying that the "desal" project is not an immediate option. He also noted that there would be 4 public meetings in April. Dr. Hubert stated that desalination should be discussed as well as accomplishments to date. Ms. Serrato expressed the need to account for suggestions and comments. Mr. Dodson discussed the need to meet with water providers to brief them on any concerns so they will be able to discuss those issues. Judge Miller asked about water reuse. Mr. Payne replied that reuse is a management option.

Mr. Dodson introduced the next topic of discussion; management strategies and options. The four options discussed are; Stage 2 Development of Lake Texana, Delivery of Garwood Water to Corpus Christi, Carrizo-Wilcox Aquifer supply, and Brush Management. Mr. Goodman from HDR Engineering began discussion on Stage 2 Development of Lake Texana. He stated that development of Stage 2 of Lake Texana is the construction of a 2nd reservoir in the Lavaca-Navidad River Basin; Stage 1 is Lake Texana. Mr. Goodman stated that Stage 2 is being looked at as a cooperative water supply source among regions L or N. Mr. Goodman noted the cost of implementing Stage 2 to be \$138 million upon delivery to Corpus Christi via the Mary Rhodes Pipeline from Lake Texana. Annual costs would total \$12.1 million/year (including the upgrade to the Mary Rhodes Pipeline). He notes a unit cost basis of \$528/acre-foot to deliver Stage 2 to Corpus Christi. Mr. Goodman noted that permitting (including a site for a reservoir) for Stage 2 is an issue to be considered. A question was asked concerning the price per acre-foot for various water supplies. Mr. Payne noted that Lake Corpus Christi and Choke Canyon water is gravity fed making them less expensive. He notes the benchmark unit cost was for Lake Texana at \$370/acre-foot; the cheapest option with a considerable amount of water. Mr. Dodson noted that the \$370/acre-foot was the planning number; the actual price is \$305/acre-foot. A question was asked concerning making Lake Corpus Christi/Choke Canyon bigger or better. Mr. Payne replied by saying that there is an option to remove sediment from Lake Corpus Christi.

Mr. Goodman next discussed the method of transporting the 35,000 acre-feet from Garwood to Corpus Christi. He discussed a diversion point just south of Garwood, building a 16-mile pipeline and the dumping the water in to Sandy Creek (where it can drain in to Lake Texana and on to Corpus Christi). Another option is diverting water at Bay City and building a "tie in" structure for delivery to Corpus Christi. Mr. Goodman next discussed the cost differences. The Sandy Creek option would run about \$30 million vs. \$83 million for the Bay City option (difference between 16 mile and 41 mile pipeline). The Sandy Creek option has a yield of 32,000 acre-feet and the Bay City option provides 35,000 acre-feet. Mr. O'Rourke from HDR Engineering next discussed the "New" Carrizo-Wilcox aquifer water supply, including the four wells in Campbellton. He stated that the four wells would have to be refurbished before water could be pumped via a pipeline to Choke Canyon Reservoir. A question was asked concerning the distance the pipeline would be from the Atascosa River and the option of putting the water in the river. Mr. O'Rourke stated that the pipeline would be placed right along the access route. He added that 1950 estimates indicated that as much as a 90% of the water is lost in route via the river. He stated that the wells are 4,000 feet deep with the water temperature around 140° F (contributes to high evaporation and thermal pollution). The yield from the four wells through 2050 is about 6,680 acre-feet/year (3,720 acre-feet by the time it reaches Corpus Christi from Choke Canyon) through 2050. Capital costs for the infrastructure comes to \$19 million with annual cost running about \$2.4 million. The price per acre-foot is estimated at \$655 per acre-foot. Wells are located in the Evergreen Underground Water district and would

require a water export fee of \$.17/1000 gallons. Mr. Payne noted that the wells would have to be re-permitted when the new pumps are installed on the wells.

Mr. Payne next discussed brush management. Long term trend analysis indicate the unit rate of runoff is significantly lower for brushland than it is for grassland. Best management practices and cost issues give indication of feasibility of brush management. Mr. Payne notes that trees require about twice as much water as grasses require. He states that there is 4.2 million acres of brush in 11 counties with mesquite (*Prosopis*) being the most abundant at (90%). Mr. Payne quoted studies completed in 1998 on N. Pancho River and one in Seco Creek. From computer modeling, projections indicate .02 acre-feet/year for N. Pancho River and .11 acre-feet/year for Seco Creek for every acre cleared. Mr. Payne quoted a price of \$9.4 million/year for the next 30 years. A question was asked whether increased runoff or infiltration were responsible for improvements in yield. Mr. Payne replied that the model included both runoff and infiltration improvements (decreased transpiration).

Mr. Dodson introduced Agenda Item VIII; Reports on South Central Regional Water Planning Group (SCRWPG) and the Rio Grande Regional Water Planning Group (RGRWPG). He stated that the SCRWPG has completed the evaluation of the 57 stand-alone options to be put together into 6 draft plans. Mr. Dodson next discussed the interregional water development option that was included in the agenda packet. Option 14A and 14B include picking up water at the salt-water barrier dam on the Guadeloupe River, piping it to Corpus Christi, (with a pipeline parallel to the Mary Rhodes Pipeline) and then trading that water for water from Choke Canyon. The option also includes increasing the yield of Choke Canyon Reservoir by diverting water from the San Antonio River followed by transporting groundwater from the Gulf Coast and Carrizo Aquifers. The option also adds tying in Garwood water to the Mary Rhodes Pipeline, interconnecting water from the Guadeloupe saltwater barrier dam with the Mary Rhodes Pipeline at the Woodsboro Pump Station (to be sent to Corpus Christi or transferred to Lake Corpus Christi or Choke Canyon via two-way pipeline), and a regional water treatment plant in Bexar County to distribute water to major demand centers. Mr. Dodson notes that the plan provides for 200-250,000 acre-feet/year whereas the region will need approximately 300-400,000 acre-feet/year. Other elements to increase supply include importation of groundwater from a portion of Carrizo-Wilcox, Bastrop, and Rockdale area, development of Edwards Aquifer recharge structures, and reuse options (20 percent by 2050 anticipated).

Mr. Robert Flores next discussed the Rio Grande Region. Mr. Flores discussed a situation in which Mexico is supposed to allow 300,000 acre-feet/year for the Rio Grande Region. The amount of water that they are holding back accounts for 1/3 of the firm yield. Judge Miller discussed the necessary action to be taken, including passing a resolution (to be directed to state and federal level politicians) to see that they resolve the issue.

Finally, Mr. Dodson next discussed issues and activities. The Senate Natural Resources Interim Committee Meeting will be on June 29th. Judge Miller called for a motion to approve submittal of chapters 3 & 4. Dr. Hubert made the motion on the contingency that if there is a problem it would be resolved or removed from action and, if it can be resolved, it would be done by the executive committee. Mr. Scott Bledsoe seconded the motion. The motion was passed with a unanimous voice vote. Mr. Flores noted a meeting scheduled for June 13th & 14th concerning federal coordination. He also noted the importance of the comment process. Lastly, Mr. Flores reminded the Coastal Bend RWPG of the TWDB meeting on April 18th & 19th.

Next meeting date was set for May 11, 2000 at 1:30p.m.

The meeting adjourned at 4:28 p.m.

Minutes prepared by

Mr. Sam Sugarek and Mr. James Dodson

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Minutes Submitted by:

Dr. Patrick Hubert, Secretary

Date

Coastal Bend

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