

## **Preliminary Response to Marana 208 Plan Amendment Proposal - October 7, 2008**

**Following are the initial comments and questions on the proposed Marana 208 Plan Amendment from PCRWRD staff, as provided to PAG prior to the Regional Council's decision to convene a Scope of Work Task Force. Questions are organized in general groups, following the relative format of the report. For most of the comments and questions, page references are included to identify a discussion of the particular topic in the draft amendment. However, some of the comments are general in nature and not focused on specific provisions in the proposed amendment, and some of the comments relate to multiple parts of the proposal. Where multiple pages are cited, the comment is listed according to the earliest discussion identified.**

### **Introduction**

1. Because the court findings are not final, describe all assumptions and the impacts of those assumptions if they ultimately are not realized. (p. 4)
2. How does Marana's proposal meet the requirement of CWA Sec. 281(c)? (pp. 1 & 33)
3. Marana states that being the DMA will provide the town with effluent ownership within the town boundary. Describe this rationale, particularly when the County is providing treatment services, and compare to existing options for effluent ownership without being a DMA. (p. 4)
4. It is stated that the 208 Plan Amendment to the PAG Area-wide Water Quality Management Plan is necessary to meet existing and future wastewater treatment needs. Please explain how the County has failed to provide capacity to Marana-area growth? Has Marana discussed regional planning with PCRWRD? (p. 3)
5. How will ownership of wastewater be addressed by Marana if the proposed DMA boundary outside the town boundary is accepted, and includes the transfer of wastewater from Pima County to the Town? (pp. 4, 11 & 12)

### **Natural Setting**

6. Discussion of Pima County effluent quality is not pertinent to this application, is misleading, and does not reflect quality of effluent that will be produced by current upgrades. The surface water quality references effluent data from an unknown period of time and appear to indicate that the effluent provided by PCRWRD do not meet current regulatory requirements but that the treatment facilities constructed by the Town will meet all new regulatory requirements. This is misleading. All RWRD facilities are in compliance with both state and federal regulations and every new treatment facility must meet current BADCT standards in order to be permitted. (p. 10)

### **Project Description - General**

7. The Town notes that through implementation of its established goals, having access to increasing effluent supplies, and being in control of its own destiny, it can provide for responsible community growth. Is the Town stating that to this point they have not had responsible community growth? (p. 11)
8. Responsible community growth is now a regional topic of discussion. Explain how acquiring control of one's own destiny by seceding from the regional system is a statement of regional cooperation and planning. (p. 11)
9. Does the Town have a 100 year assured water supply for the 10,000 plus new customers they intend to acquire? (pp. 12, 18 & 19)

### **Project Description - Regulatory**

10. Statements of effluent quality are not consistent within the amendment document. Clarify the planned effluent quality for each facility. (pp. 11 & 30)
11. Describe why the location of a reclamation facility in Pinal County, to treat Pima County wastewater, is beneficial to Pima County. (p. 11)
12. The statement regarding the location and ownership of WWTPs is not clear as to which facilities are located within the Town and which are located within the requested proposed DMA boundary. (pp. 11 & 22)
13. What are the available hydro power credits, who owns those credits, how will they be acquired by Marana, and describe how they will be collected and applied at each facility? (pp. 11 & 25)
14. The Amendment mentions several features, including a future Barnett Channel, as sewer basin delineators. Provide details on and the location of the Barnett Channel, and include a discussion on why sewer conveyance system design cannot overcome the features' impacts. (p. 13)
15. Do the irrigation canals within the town provide boundaries for gravity sewer installation, and if yes, identify those impacts and locations. (p. 13)

### **Project Description - Planning**

16. The population projections are not consistent with the planning approaches of RWRD, Tucson Water, and PAG. Describe the risks, impacts, assumptions, and justification for planning with a different approach than is generally accepted by PAG, Tucson Water and RWRD. (pp. 12 & 17)

17. Describe why using land-use instead of PAG TAZ data provides more accurate short, medium, and long range growth projections. (p. 12)
18. Describe how the 20-year growth numbers were developed from a land-use planning approach. (pp. 12 & 17)
19. Growth figures appear to be exaggerated from even the growth rates seen during boom years. Describe in detail how the past growth trends match the short, medium, and long-term growth projections for this plan. (pp. 12 & 17)
20. If Basin 24 continues to flow to the Ina Road treatment facility (page 13, bottom of page), is the Town willing to approve of the County providing service within the Town's planning area? (p. 13)
21. Where does Equivalent Dwelling Unit data come from? (pp. 15 & 17)
22. One acre of commercial land use will produce the same amount of wastewater as four single-family residences. This figure may only be correct for food service type commercial entities and certainly does not represent the current commercial entities that currently operate within the Town's boundaries. In September, 2008, Marana withdrew from TREO because they were unhappy with the lack of commercial development occurring within the Town's boundaries. How does the town plan on generating the amount of commercial development proposed in the plan? (p. 15)
23. Tables 5 and 6 show a 2013 flow projection of 4.2MGD. Current flows, indicated in Table 2, show flows of approximately 2.83MGD for a difference of 1.3MGD. This equates to a five year population increase of 14,607 persons or 20,968 persons when using either PC or the Town's per capita usage figures. The current population of the Town is 32,300. Justify growth projections from recent historic trends or data. (pp. 18 & 24)
24. The proposed average dry weather flows for the CRRPS and proposed Airport Lift Station shown in this amendment are significantly higher than those for the proposed WRFs to which these lift stations will discharge. Provide a summation of the flow calculations for each WRF tributary basin, including the partial capacities that will be handled by the pump stations. (p. 19)

### **Existing Conditions**

25. Marana has used language referring to "taking over the Marana Utility" in regards to wastewater. Identify the description of this utility and what assets are to be taken over with it. (p. 20)
26. What are the economic factors used to justify closing the Marana WRF instead of utilize the current facility? (p. 20)

27. Lift stations and force mains are mentioned in report but no additional information is provided. Report should include description of locations, capacity, schedule, and cost to construct and operate. (p. 24)
28. Is Basin 22 added to the 208 Amendment solely for the purpose of eliminating flow through sewers within the proposed DMA planning area? Isn't that inconsistent with the preliminary court order? (p. 21)
29. Can Basin 22 be included in the Town's 208 Plan Amendment without also being included in its general and/or and specific plans? (p. 21)

### **Wastewater Reclamation Facility Alternatives**

30. The Town appears to plan on cutting off the flow to the Marana WRF. How does Marana intend to compensate the County for the outstanding debt carried by this facility? (p. 22)
31. The addition of new reclaimed water infrastructure is not adequately addressed. Provide construction sequencing, capital costs, and water balance for use of reclaimed water. (p. 30)
32. Does Marana intend to purchase the Marana WRF? (general)
33. How will the deep incoming lines into the Marana WRF be re-routed to the proposed new northern facility? (general)
34. The requested DMA boundary does not include the development of Jaguar Lane (Arboles Viejos) outside the Marana boundary, which is designed to flow to the Marana WRF. How does Marana plan on addressing this inconsistency in regional planning? (general)
35. Explain how the Continental Ranch Regional Pump Station (CRRPS) will be modified as identified in the basin study, including costs, scheduled and flow projections. (general)

### **Reclaimed Water**

36. Include a description and graphics of the current and proposed reclaimed water systems, and provide a 20-year water balance budget for reclaimed water use at each facility. Costs should also be identified for construction and O&M of the system, including recharge basins, through the 20-year planning period. (p. 30)
37. The topic of reclaimed water is not supported by a discussion of the reclaimed water distribution system. Provide support data on existing and proposed reclaimed water systems and cost to construct and operate. Provide reclaimed water use projections to show how system will utilize the generated reclaimed water. (p. 30)

38. Provide a map showing the location and expected rate of reuse of reclaimed water for the DMA at 2028 and at buildout. (p. 30)
39. Describe and provide a cost estimate for the infrastructure necessary to convey the reclaimed water. (p. 30)
40. Provide a water balance for the reclaimed water produced at each of the proposed WRFs. (p. 30)
41. Provide a detailed description and cost estimate of the reclaimed water storage facilities will be needed at each of the proposed WRFs. (p. 30)

### **Impacts of Proposed Facilities**

42. Describe the impacts of proposed sewer system modifications (sewers, lift stations, force mains) on the current system, and provide details on how the system is to be re-configured. Include cost impacts of acquiring the County conveyance system and a schedule of new sewer construction. (p. 30)
43. The sites of proposed Sandario and County Line WRFs are very close to existing airports, at least one of which is currently handles significant amount of large jet traffic, and the likely use of reclaimed water recharge disposal basins is referenced in the Non-Point Source Issues and Mitigation Procedures section of the draft amendment, during periods where the seasonal landscape irrigation water demands are less than the amount of reclaimed water generated. Such basins tend to attract waterfowl, that pose serious in-air hazards to both large and small aircraft. What mitigation measures will be taken at these sites to prevent excessive numbers of birds from flocking to these sites? What will those mitigations measures cost? (pp. 30 & 31)

### **Financing** (p. 31 for all)

44. The Town notes that the debt issued to construct WRF's will be redeemed by a combination of user fees and new development fees. Since existing homes have already paid a connection fee, how does the Town justify billing them through user fees for the replacement of adequate existing treatment and conveyance capacity?
45. Develop a conservative growth model based on historical trends to determine if growth will pay for projected capital projects under a conservative scenario. (Marana Permits issued in the noted years show substantial variation: FY2005-1800 permits, FY2006-800 permits, FY2007-500 permits)
46. Describe why the construction of three new facilities and additional pump stations provides a more economical solution to residents for sewer service, and in particular, explain how construction of new facilities to replace existing County capacity is beneficial to rate payers and how it complies with ARS 9-516(A).

47. Is Marana's designation as a DMA the most economical solution to providing regional wastewater service? Provide the data supporting this conclusion.
48. How does Marana intend to implement their rate plan with existing customers of Pima County wastewater services?
49. How does Marana intend to justify imposing sewer user rates on residents while treatment is currently being provided by Pima County?
50. How does Marana plan on entering into service contracts with non-town residents?
51. Discuss how the proposed ownership switch from Pima County to Marana will impact existing obligations to land owners and developers within the proposed DMA boundary for oversizing credits and connection fees discounts.
52. How does Marana plan on resolving contractual issues with the different water provider's interests in effluent ownership treated within the Town of Marana and the proposed DMA boundary?
53. Does the Town expect the other water utilities to continue delivering water to their current customers?

### **Setback Requirements**

54. If biosolids management includes drying beds, the necessary buffers may be much larger than those required for a totally enclosed facility. Please explain how odors will be managed and identify costs for additional buffers. (p. 32)

### **Permits**

55. It is indicated that biosolids will be disposed by landfilling at either Florence or Butterfield. The Florence location does not accept liquid waste therefore the Town would need to thicken the biosolids to at least 25% total solids before acceptance at the landfill. Butterfield is 92 miles from the county line and Cactus is 29 miles from the county line. Provide detailed biosolids management costs, reflecting operation, maintenance, and disposal. (p. 33)
56. Present a Biosolids Master Plan including sludge processing, cost to transport, and proximity of sludge facilities to planned development should be discussed. The costs of sludge/biosolids handling should be presented as O&M costs. (p. 33)
57. A conveyance system permit and a certified operator are required by ADEQ. Provide information on the approach and costs associated with operating and maintaining a sewer conveyance system. (p. 34)

58. Provide additional discussion on the approach to use of the APP permit and the AZPDES permit. Report is not consistent in how these permits will be used. (p. 33)
59. Executive summary only mentions an APP permit. Please elaborate on all ADEQ permits that each facility will obtain, and describe the proposed volume of use for each permit. (p. 33)

#### **Construction Schedule** (p. 35 for all)

60. A cost-loaded CIP project schedule should be developed for the selected alternative, with a tracking curve of projected capacity from selected base-case and conservative alternatives.
61. A financial plan should also be provided with this presentation matching growth with income and capital expenditures. Actual dates should be presented in the schedule.

#### **Implementability**

62. Additional detail on implementing this plan is required. (p. 36)

#### **Operation and Maintenance**

63. Discussion of operating a conveyance system is not in this report. Discuss the approach to conveyance O&M and associated costs. (p. 36)

#### **Proposed DMA Boundary Expansion** (p. 36 for all)

64. Demonstrate that the proposed DMA boundary is comprehensive from a regional perspective and more economic than Pima County service.
65. Is it acceptable to allow for sewage and effluent to leave Pima County (overlapping proposed DMA boundary with Pinal County)?
66. Explain why the proposed DMA boundary was established outside the town, and why the proposed DMA boundary will provide a more economic wastewater delivery solution than currently being provided by Pima County.
67. Please explain what voice these customers would have in the Town's operation of a sewage collection and treatment system.
68. Explain the location of the proposed DMA boundary and impacts to the existing Lower Santa Cruz Managed Recharge Project.
69. What is the basis for extending the service area into Pinal County?

70. Why is the proposed DMA boundary greater than the Town Boundary and what is the legal basis for expanding the proposed DMA boundary?
71. How will recharge credits and movement of effluent be handled across AMA and county boundaries?

### **Appendices**

72. There are several instances within the Towns 208 Plan Amendment that are not in sync with the construction schedule on page 35 (i.e., Appendix A, page 3, 4<sup>th</sup> bullet point, Appendix A, page 7, 2<sup>nd</sup> bullet point).
73. Appendix A, page 1, 2<sup>nd</sup> bullet point states that the Marana WRF is located in the Town and all maps provided in the 208 Plan Amendment show that it is not.
74. Appendix A, page 6, last bullet point notes that proposed methods of financing include taxes. What type of tax does the Town intend to levy?
75. In Appendix C, item (G) the Town assures in implementation of the 208 Plan that each participating community pays its proportionate share of treatment costs. What other communities are they referring to?