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## **ARIZONA DEPARTMENT OF WATER RESOURCES**

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### **Water Resources Development Commission (HB 2661) Environmental Workgroup– Notes: February 8, 2011 Meeting**

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#### **IN ATTENDANCE:**

Warren Tenney (Metro Water, Workgroup Co-chair)  
Val Danos (AMWUA)  
Rebecca Davidson (SRP)  
Santiago Garcia (USBR)  
Amelia Homewytewa (GRIC)  
Doug Kupel (City of Phoenix)  
Jim Renthall (BLM)  
Ron Soloman (Taylor)  
Chris Udall (ABC)  
Nicole Eiden (AZGFD)  
Karen Nally (for HIDD and CAIDD)  
Bill Plummer (ABC)  
Linda Stitzer (ADWR)  
Dave Weedman (AZGFD)  
Jean Calhoun (USFWS)  
Rob Marshall (TNC)  
Summer Waters (Coop. Ext.)  
Bill Wells (BLM)  
Joanna Nadeau (WRRC, by phone)

#### **INTRODUCTIONS AND UPDATES:**

Attendees introduced themselves and Warren thanked the group for their continued hard work. He noted that this environmental cataloging has not previously been done and will be an important contribution. The goals of the meeting are to reach consensus on the table format and address remaining mapping issues so that the work can be completed.

#### **REPORT FROM ENVIRONMENTAL CONDITIONS SUBCOMMITTEE:**

- Changes to the table since the last meeting were noted including delineation of reservoirs as to whether there is volumetric or surface area data available; consolidation of springs as a single water feature with different spring categories shown under water feature characteristics; column heading changes to conform to language in "Terms and Definitions" handout. The number of wildlife catchments will be added to the "stockpond" row.
- It was suggested that federal reserved rights be added to the Federal/State Designation row and that Jim Renthall and Jean Calhoun provide quantified volumes for the table.
- Also suggested clarifying that the table shows quantifiable flows e.g. "Total *quantifiable* flow...."
- The group approved the final draft table format with the suggested changes.
- The revised terms and definitions document was discussed. Recommendations were: clarify that baseflow is water available for the aquatic environment and takes into account upstream cultural

diversions of water; mention floodflow in the total flow definition; define Federal reserved water rights. Linda will revise the definitions and distribute.

- The table "Headnotes" will be on a separate page due to their length, with one for each basin. They will be written by volunteers from Maricopa Cooperative Extension, USFWS, USFS, ALWT, Riparian Council and AZGF. Rebecca has provided a template and suggested reference sources, and will be the "clearinghouse" so that the content should be relatively uniform. She has requested that these summaries be completed by the end of February.
- Joanna will work with Rebecca on the economic values section and incorporate work from AZGF.
- Rob discussed work on ET estimates. The USGS has estimated ET by assuming there is riparian vegetation extending 50m on either side of a perennial stream. AZGF riparian vegetation data are a combination of modeled (SWAP) and field verified (1993 Riparian Inventory) information. We don't yet have the complete acreage numbers to complete the ET calculation.
- There was considerable discussion of the approach and it was agreed that estimates using the USGS and AZGF SWAP/1993 scenarios would be generated. Because there is concern with overstating the extent of riparian vegetation using SWAP, it was suggested that the 1993 dataset be evaluated to see if it covers the study area; if not the modeled data could be used.
- The bottom line is to use data considered as correct as possible and to clearly document the approach.
- TNC is developing baseflow estimates for the lower San Pedro and Bill Williams rivers since these systems are important but were not included in the TNC study of 18 watersheds.

#### **REPORT FROM MAPPING SUBCOMMITTEE:**

- Rebecca distributed examples of basin-scale and county-scale maps. In order to distinguish mapped features, it is suggested that the county-scale map consist of two separate maps; one focusing on land tenure and the other on natural resources, with streams and perennial flows as unifying features on both maps. There was agreement to generate these county-scale maps
- All features are clearly displayed on the basin-scale maps. It was suggested that maps showing several basins could be generated for those areas with few environmental resource features, thus limiting the total number of maps.
- County scale maps in northeast Arizona (Apache and Navajo) may be difficult since they are long and narrow, and the very large Little Colorado River Basin may need to be broken into sections.
- The extent of riparian vegetation is exaggerated for mapping purposes and will be noted. To distinguish between the field verified and modeled riparian vegetation data, maps will display the 1993 AZGF Riparian Inventory data as solid green and the modeled SWAP data as hatched green.
- The mapping data will be packaged into a GIS product and made available for other purposes such as by the Water Supply and Demand Workgroup.

#### **DISCUSSION OF SUMMARY OF FINDINGS OUTLINE:**

- A draft outline was distributed that incorporates some of the comments that have been received, but there were some inadvertent omissions to this version. Jim Renthal will send out a revised version.
- Warren commented that we need to focus on the document as a summary of findings and encouraged the workgroup to continue reviewing and revising the document via email so that it can be discussed in more depth at the next meeting.
- It was mentioned that the narrative would be more evident once the tables and maps are completed, which will also help develop the recommendations. Some thought that the summary should focus on the work of the workgroup but agreed that the final report may also contain some controversial aspects. The recommendations section will include any discussion about future environmental conditions.

**ENVIRONMENTAL WORKGROUP SCHEDULE:**

- Tables should be completed by March 7<sup>th</sup>
- Draft basin discussions are due to Rebecca by February 28<sup>th</sup> and will need editing. Final drafts due March 7<sup>th</sup>
- Target completion dates are March 7<sup>th</sup> for the draft maps and GIS data.

**DISCUSSION OF WORKGROUP REPORT TO COMMISSION (FEBRUARY 11<sup>TH</sup>):**

- A draft table for the Bill Williams Basin, without any numbers, and a corresponding map will be distributed. "Headnotes" will be explained.

**NEXT MEETING:**

- March 4<sup>th</sup> at 9:00 am at ADWR in the Verde Conference Room