

# ***Brief Web Survey of Other Multi-Purpose Storage Options/Status in WRIAs Neighboring WRIA 54***

August 09, 2006 ~ Bea Lackaff - citizen

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## **WRIA 55-57 Middle Spokane and Little Spokane Rivers**

The Planning Process is in Phase 4 – Implementation.

The Planning Unit for the Little and Middle Spokane watersheds has undertaken an assessment of storage options. A two step approach was taken in which a broad range of options were considered in the first step, after which the Planning Unit chose three specific options for more in depth development.

The storage options included the following concepts: the potential for Aquifer Storage & Recharge (ASR) in WRIA 55, new reservoir development in WRIA 55, and restoration of formerly drained wetlands and discharge of reclaimed water to wetlands in WRIA 57.

## **WRIA 56 Hangman (Latah) Creek**

The Hangman (Latah) Creek Water Resources Management Plan is now complete. The Plan is now before the Commissioners of Spokane and Whitman Counties for adoption.

Overall, there is little natural water storage capacity in the watershed. Land use patterns have modified the majority of the basin from natural camas prairie vegetation to dryland crop agriculture. The effect of these land use patterns has been to further reduce the intrinsic water storage capacity of the watershed and accentuate the flashiness of the hydrologic regime, causing higher peak flows and lower summer flows, along with accelerated sediment erosion.

No one storage option will completely satisfy the wide range of physiographic features and needs of the Hangman watershed, so multiple options may be the appropriate method to enhance the quantity of water for consumptive and in-stream needs. Studies done in the watershed indicate that significant gains could be produced with small increments of flow addition. Each cfs of additional water would add 5 percent or more to physical habitat values during low flow conditions. This relates to the primary goal of this multi-purpose storage assessment – to increase summer low flow conditions.

To provide direct comparisons among water storage options in WRIA 56, the options were reviewed under the context of their ability to attain a standard value of 600 acre feet of water storage. A storage volume of 600 acre-feet can sustain a streamflow augmentation of approximately 3 cfs for three months.

The most cost-effective options for increasing flow are to drill or pump new and existing wells to augment the streamflow with groundwater and wetland restoration. However, these options will only augment flows in the lower and middle portions of the watershed.

Only three major storage options provide streamflow augmentation to all areas of the watershed. These three options include the use of catchment basins to capture and store water in the upper watershed, developing balancing basins in the upper watershed to capture and store runoff during peak periods, and creating Smith Creek Dam. These are however, significantly more costly options to implement.

## **WRIA 59 Colville River**

CURRENT PLANNING PHASE: Phase IV – 1<sup>st</sup> Year of Implementation.

From a Conversation with Linda Kiefer, WRIA 59 Watershed Coordinator, Stevens County:

WRIA 59 has water rights closed – water storage needs to support growing municipalities (Chewela, Colville) as well as small-scale production agricultural needs. Initial Multipurpose Storage studies provides a very wide range of possibilities – however additional studies were required to provide several medium and small scale options that will keep water in the

watershed. These options may include pre and post irrigation management to build up retention, diverting spring runoff to capture or slow water leaving the basin, and/or strategies for raising/lowering lake levels. Additional grants were necessary for further studies. The possibilities of additional storage and a more flexible water rights management plan are still under consideration.

**TIPS for studying Multipurpose Storage:**

Involve the Planning Unit and stakeholders throughout Storage Study process; allow ability for PU to change direction of Study as appropriate, as information from study becomes available.

Do public outreach to inform public of Study, definition and need for Multipurpose Storage, and invite ideas from public. Public support is crucial to success.

Land owner permission is crucial to any development of plans – the public should be informed, invited to participate with ideas and questions, and permissions obtained for further study and development at the beginning of any

Storage management high in the watershed has potential for storage benefits for entire WRIA.

The results of study must work on the ground, with landowner permissions, within small budgets.

**WRIA 43 - Upper Crab/ Wilson Watershed**

In Phase 3 – developing The Management Plan; studying Storage.

**WRIA 34- Palouse River**

In Phase 2/3 – does not list Storage as an option they are studying.

**WRIA 53- Lower Lake Roosevelt**

No watershed planning info is available.