

## SONOITA CREEK FLOOD and FLOW STUDY COMMITTEE

MISSION: The watershed is a vital component of this community's well-being. The Sonoita Creek Flood and Flow Study Committee will (i) make recommendations to the Patagonia Town Council with respect to best practices within its jurisdiction to manage erosion, to enhance water flow, to create optimal flood mitigation and to promote the long-term health of the riparian corridor, (ii) look at the entire watershed area to influence upstream conditions and to optimize downstream consequences, and (iii) educate the public.

### MINUTES for December 8, 2016 Meeting

(NOTE: this meeting's recording is available at Town administrative office)

ATTENDEES: Dave Teel, Carolyn Shafer, Anne Townsend, Dave Ellis, Kathy West, and Meg Gilbert; Guests were Susan Belt, Michael Stabile, Bill O'Brien and Randesia Riggs

1. Approval of November 10, 2016 Minutes – Anne moved and Carolyn seconded approval of minutes. Minutes were approved unanimously as written.
2. Discussion about the Town of Patagonia draft drought plan and the upcoming December 14 Town workshop. The draft is posted on the Town's website. Meg asked for clarification of the chart on its next to last page. Dave T. agreed the Council needs more discussion. Meg asked about the rate going up in Extreme Drought? How does that relate to the stated amount per month? Dave T. said both would apply. First there would be a warning, then a fine and in the worst case the Town would cut off the offender.

Meg explained there will be more discussion re residences and businesses about all this. Kathy asked for documentation on what the school did in case others want to know.

3. Retention pond solution. Dave. E. first corrected his misimpression regarding the Town's surface water rights and said that the Town does indeed have such rights, amounting to 629 acre feet of water a year (this equals 205 million gallons water a year). This was the result of a prior disagreement in the early 90's between the Town and TNC, which also said that by the year 2040 the Town was to have 1500 acre feet a year, which is more than is likely available. We now know that our surface water availability depends on upstream use.
4. Upstream users have rights that supersede those of downstream users, but they are limited to only what they're already permitted to use. To increase the amounts permitted users

would have to get new permits, and this would require a larger discussion between up- and down-stream users. If the disputed area is outside of an Active Management Area, Arizona Department of Water Regulation is forced to adjudicate each situation individually, including Irrigation Management Areas and including ground, not just surface, water.

Bill explained that first, local entities outside of an AMA get together and agree on allocations, and that goes to a court.

So, Dave E. explained, we need to get flood water managed during peak floods and he has managed to get the US Geological Survey office in Tucson to agree to model our August 9 event, which is very different from FEMA's definition of our area, to determine just what could happen, did happen and how it relates to other uses of the watershed above us. He produced a draft document/proposal date 12/3/16. State Climatologist, Nancy Selover, has reviewed it and agrees with it. The goal is to capture the flood waters, or as much as we can, and release it in a safe and controllable manner.

Bill O'Brien said there are other examples of detention ponds where water is released via an overflow, a trickle release that allows percolating to the ground water level, a few feet below the bottom of the pond. This then becomes an ideal natural area. Per Dave E., this all should be able to decrease flood insurance costs.

5. Watershed Planning Concepts. Bill O'Brien displayed a blowup of the Sonoita Creek watershed (created by FOSC) and pointed to where he felt there were "hot spots" where it would be possible to install "detention basins" (multiple-purpose ponds), using stickers to pinpoint them. There were a lot of stickers.

He then proposed that his firm develop a watershed management plan for Sonoita Creek's watershed, for the F&F's consideration at its January 12<sup>th</sup> meeting, and for eventual presentation to the Town Council for consideration. Bill said FEMA will accept the best local, state and county estimates of risks and so all the stakeholders will need to get together to discuss all this.

We would start with the Town's Drought Management Plan and then see how much water is being used upstream. This would eventually result in a watershed "Water Balance Plan;" concrete numbers would emerge.

He estimates the cost of coordinating all this and developing this "Water Balance Plan," would be about \$100,000 over the next three years. Randicia said that she thinks they could get a grant from the US Department of Agriculture to 100% fund this. Part of their scope of work could be to apply for this and other grants.

Dave E. will draft a proposal to ADWR by the September 2017 deadline.

NextGen Engineering will present a draft proposal at the January 12, 2017 meeting.

Kathy asked Dave Ellis to send some kind of proposal for his proposed location for a retention pond on TNC property outside Patagonia to Eric, who is in charge of this Nature Conservancy region, because if TNC says "No," that is that and then we would be back to smaller retention ponds.

5 Anne reminded the Committee of the upcoming Saturday, December 17 10:00 a.m. presentation at Cady Hall on Patagonia's watershed by expert Dr. Laura Norman.

6 Next Meeting: January 12, 2017 at 10:00 a.m.