

## **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 minimize downstream consequences, and (iii) educate the public.

### **MINUTES FOR June 14, 2018 Meeting**

Attendance: Carolyn Shafer, Marty Lawrence, Kurt Vaughn, Dave Ellis, Murphy Musick, Kate Tirion, Marco (Next Gen), Heather Dodge, Ben Costello (Oak Bar Ranch)

Meeting minutes from May 10, 2018: Dave Ellis moves to approve; Kate Tirion second; Minutes approved unanimously.

Murphy Musick reported on the status of the CRS program. Murphy reported on the PPI committee requirement and that the Town Council authorized him to decide how to establish the committee. Following discussion about establishing the PPI committee as a committee within Flood & Flow Committee, Marty Lawrence moved and Kate Tirion seconded a motion to establish the PPI Committee as part of the Flood & Flow Committee action items. It was unanimously voted to establish the PPI Committee as part of the Flood & Flow Committee.

Dave Ellis gave a report on the PAWS / AZDEQ project:

My view, hopefully shared by the PAWS-team, is that:

1. Water respects no legal boundaries. Patagonia is 1.3 sq miles. Upstream from Patagonia Lake, the Sonoita Creek Watershed is 210 square miles.
2. Water Quantity issues (Flood & Drought) originate in the Watershed, not in the town. Water for mining activity drawn from deep aquifers may, over time, affect the level of water in the shallow Sonoita Creek aquifer.
3. Given the size of the mining activity, some mine-related water may flow down Harshaw Creek. This water would likely influence the shallow Sonoita Creek aquifer.

4. Patagonia is the entity best suited to consolidate what we do and don't know about the Sonoita Creek Watershed. Any consolidation must include publicly available information provided by AMI (After all, they have done the most complete study of water in our aquifers) Because of its legal status, the town is well suited to seek financial assistance from County, State, and Federal agencies to address both water quantity and water quality issues.

5. The Patagonia Area Water Study (PAWS) was formed in January 2018. Over the past 5 months We have developed a 21-site database of surface water in the nearby watershed. Sites are graded according to the time interval during which surface water is flowing: Perennial (100%), Intermittent (> 60% annually), and Ephemeral (flow only during flood events). The sites are further divided by proximity to new mining activity. Nine sites have high priority and will be sampled monthly.

6. If the town had a significantly upgraded web presence, it could be the go-to place for residents to find factual, science-based, information about our watershed. This would help correct misinformation now available in town. Examples:

“Our water table has been lowered by the winery wells in Elgin.”

“Excess gravel in the creek has reduced flood water flow under the Rt 82 bridge.”

“There is plenty of water under Patagonia -- It goes down 300 ft”

David Ellis July 1, 2018

At recent Town Council meetings, Kathy Pasierb was approved as a member of the Flood & Flow Committee and the Council approved Murphy Musick choosing the way to establish the PPI Committee.

After a brief discussion, it was affirmed that Carolyn Shafer will continue to Chair the Flood & Flow Committee.

Miscellaneous updates included (i) no word from the County about the big log in Harshaw Creek and (ii) PARA will release a film titled “Water Matters More” soon.