We visited the Rustand property (109-22-020M), the site of an ongoing violation due to placement of fill and debris on the south bank of the Tanque Verde. The debris was noticeably undercut in at least one location, and it appeared that fresh fill/debris had been recently placed in at least one location. Photo taken of recent fill, approximately Lat. 32.269045, Long. -110.871144.

We then visited the Mule Power Farms property (205-52-029C). Debris was observed in the overbank. Based on debris evidence, the flow appeared to be 18 inches deep at the back gate near the main channel of Tanque Verde Creek. Debris was observed as much as approximately 175 feet from the bank of the main channel at the eastern portion of the loop driveway on the property, the probably marks the edge of the Tanque Verde floodplain at this location (Lat. 32.2460.2, Long. -110.746631). Four photos taken.

We then visited the 49ers Country Club area, specifically those properties along Barbary Coast Road and Sutter Mill Street. We started at the intersection of Barbary Coast and Fortyniner Drive and went west.

Large portions of an open wood fence were knocked over at the Decker property, 12200 E. Barbary Coast Rd. (205-50-093A and 205-50-0940). Water did not appear to have entered either structure on the property, however other personal property was damaged. This property is in receipt of a LOMA, that removes there property from the floodplain. Five photos were taken.

The Castillo residence at 12150 E. Barbary Coast Rd. (205-50-0900) was flooded and two portions of the block wall collapsed. The Castillo’s were not home, but a clean-up/restoration crew was working at the house. Based on the evidence, it is believed that the block wall at the rear of the property collapsed first, then water was impounded in the back yard, causing the west side yard wall to collapse. Water marks on the outside of the west side of house were about 34 inches above grade. A water mark on the inside of the western property wall was approximately 36-38 inches above grade. It is possible that this flood height was increased by impounded by the front block wall. It is difficult to say how much mud was deposited as the floodwaters receded, which would affect the flood height during the flood peak. According to the restoration crew, the residence was fairly seriously damaged. Five pictures taken.

The neighboring residence, owned by the Ashbrooks at 12140 E. Barbary Coast Rd. (205-50-0890) was flooded as well. A debris line on the rear wall of the house is approximately 30 inches above the newly deposited sediment against the base wall. The sediment is likely no more than 1 inch thick. The block wall along the back of the
property was largely destroyed. Individual blocks from the wall were found approximately 40 feet downstream from the wall. The Ashbrooks were not at home at the time, but phone contact was made the next day. Five photos were taken.

Across the street, the Travers residence at 12045 E. Barbary Coast Rd. (205-50-0680) was partially flooded. Water entered the garage, and started getting in to the main house, but the Travers family was able to prevent the water from getting more than a few feet inside the house. There was more debris on the property than found on the Castillo or Ashbrook property, which may be the result of the flow spreading out and slowing down. It is also possible that the property renovators for the Castillos and Ashbrooks had already removed exterior debris. Flood waters traveled between the Travers residence and the Carrion residence at 12101 E. Barbary Coast Rd. (205-50-0670), and flowed down the fairway of the golf course. One picture was taken.

The Carrion residence and detached garage at 12101 E. Barbary Coast Rd. (205-50-0670) were flooded. Mrs. Carrion reported that the water was about 1 inch deep inside the house but was deeper inside the garage. According to Mr. Carrion, some of their belongings (trash can, Rubbermaid shed and some fire wood) were found about a 1/4 mile away, down the golf course. Mrs. Carrion reported that their flood insurance wasn’t helping because the covered damages are less than their $2000 deductible. The garage is apparently not considered covered by the insurance since it is detached. The debris line on the back of the garage was approximately 15 inches above the newly deposited sediment, which is believed to be approximately an inch or two inch deep. Three photos taken.

We were informed by a neighbor that the Garcia residence at 12030 E. Barbary Coast Rd. (205-50-0850) flooded. The debris line on the eastern side of the residence was approximately 10 inches above grade. Water was flowing south between the Garcia residence and the Dent residence, away from Barbary Coast Road back towards the main channel. High ground behind the two properties appeared to impede the water and thus may have exacerbated the problem due to backwater effect. One photo taken.

The Dent property at 12040 E. Barbary Coast Rd. (205-50-0860) had water in the garage, but was short of getting in to the house by a couple of inches, according to Mr. Dent.

Continuing west on Barbary Coast Road, it appeared that flood waters were near to the finished floor elevations of several houses, but it wasn’t obvious whether water entered the structure or not. There were rugs hanging out to dry at 11935 E. Barbary Coast Road (205-50-0740), implying that water may have entered the home.

There was evidence that, as the flood waters were moving west down Barbary Coast, the main flow path moved back and forth across the street, and occasionally took a path between houses out to the fairways north of Barbary Coast and back. It appeared that most of the water flowing down the 16th fairway appeared to hit the green and go get diverted between the houses back to Barbary Coast Rd. Two photos taken.
After getting to the west of Barbary Coast, at Soldier Trail, we drove east to the intersection of Barbary Coast and Sutter Mill.

The Farkas residence at 12440 E. Barbary Coast Rd. was flooded with 4-6 inches of water inside the home. The Farkas’ felt that the “dump” where the golf course puts tree trimmings and other debris exacerbated the flooding problem at their house. We then spoke with the neighbor to the east. They were able to prevent water from getting in to their home, but barely. Water did get in to the back yard. The owner credited a berm outside the wall and the fact that they replaced the back gate with block wall for preventing their home from being flooded. He also talked about the debris that the golf course dumps nearby.

We went to investigate the “dump” and found large piles of debris consisting mainly of tree trimmings and other green waste. Portions of the pile were up to 7 feet tall. The pile was more than 200 feet long and varied in width from about 12 feet to over 25 feet. It appeared that flood waters broke through a ten foot section of the debris pile, flowed across a graded area, then as debris got caught in the thick vegetation at the western end of the graded area, was forced north onto the 7th hole of the golf course and toward the residences at the east end of 49ers. The debris pile is located in the Floodway and is likely not allowed, and some of it may actually be off the golf course property. Eight pictures taken.

As we walked west along the Tanque Verde Channel, it was apparent from the debris, that floodwater continued to flow onto the golf course. As the water was flowing downstream, it was also flowing to the north towards the residences. Two pictures taken.

The Leavitt residence at 12518 E. Barbary Coast Rd. (205-50-1100) was flooded with an unknown amount of water, and it appeared that the Drake residence at 12510 E. Barbary Coast Rd. (205-50-1090) was also flooded. Based on the large amount of debris behind and between these two properties, it appeared that at least a foot of water flowed between the homes. A fairly sizeable gravel bar was deposited in the front yard of the Leavitt property. Eight photos taken.

There were household belongings out to dry at the Rieck residence at 12505 E. Barbary Coast Rd. (205-50-1140), which was flooded. One photo taken.

At the end of the day, we quickly investigated Sutter Mill Street and the fairways. On Sutter Mill, based upon renovator trucks in driveways, it appeared that the following residences were flooded: 12335 E. Sutter Mill St. (205-50-0210), 12345 E. Sutter Mill St. (205-50-0200), 12410 E. Sutter Mill St. (205-50-0300). A pick up truck full of carpet pieces was seen in front of 12445 E. Sutter Mill St. (205-50-0150), which may also indicate that it was flooded. It seems likely that other homes on Sutter Mill St. were flooded, but there wasn’t enough time to investigate.

On the fairways, the flood continued flow to the west at a depth of approximately 18-24 inches. At the water system, the chain link fence caused water to back up to approximate
4 feet before the fence was knocked over. There was significant erosion around the water storage tank with bedding ring, and bedding damaged. There was evidence of flow from the Tanque Verde channel continuing to enter into the fairway. It appeared the flow entered the residential area from the fairway at two main locations. At the Fortyniners Dr. cul-de-sac and at the intersection of Barbary Coast and Sutter Mill. This appears to due to the flattening out of the fairway. In many areas the fairway grade is about 2 feet below the grade of the adjacent residences, but at these locations, the fairway grade and the residential grade become relatively even, which allows water to flow north into the neighborhood.

By the end of the day, we tallied at least 12 homes that we either know were flooded or there was strong evidence that they flooded. Another four homes either had a garage flooded or appeared to have flooded inside the home. There were likely other homes that were flooded, however.
On 1/7/2014, a potential buyer of 12401 E. Barbary Coast Road informed the District that the current owner mentioned that this house flooded "several years ago", so it likely flooded during this event. - B. Jones
Recent fill placement on Rustand property 109-22-020M (looking S)
Flood debris on Mule Power Farms property 205-52-029C (looking NW)
Flood debris on Mule Power Farms property 205-52-029C (looking NW)

Approx. 18" flow depth at gate

Flow
Flood debris in Tanque Verde behind Mule Power Farms property 205-52-029C (looking W)
Fence knocked down behind 12200 E. Barbary Coast Road. 205-50-093A. Looking SSE.
12200 E. Barbary Coast Road. 205-50-0940. No apparent damage to structure. Looking NE
12200 E. Barbary Coast Road. 205-50-0940. Fence pushed over. Looking N.
12200 E. Barbary Coast Road.  205-50-0940. Looking NE
12200 E. Barbary Coast Road. 205-50-0940. No apparent damage to structure. Looking E

High water mark
12150 E. Barbary Coast Road. Castillo Property. 205-50-0900. Flooded home. Looking SE.
12150 E. Barbary Coast Road. Castillo Property. 205-50-0900. Looking SSW

High Water Mark, approximately 38" high (impounded)
12140 E. Barbary Coast Road. Ashbrook Property. 205-50-0890. Flooded home. Looking NW
High Water Mark (approx. 30" high)

12140 E. Barbary Coast Road. Ashbrook Property. 205-50-0890. Flooded home. Looking N
12045 E. Barbary Coast Road.  Travers Property.  205-50-0680. Water entered garage, but residents were able to confine flow to near entryways. Looking NW
12101 E. Barbary Coast Road. Carrion Property. 205-50-0670. Home and garage flooded. Approx 1" of water in home, deeper in garage. Looking NE.
12101 E. Barbary Coast Road. Carrion Property.
12030 E. Barbary Coast Road. Garcia Property. 205-50-0850. Home flooded according to neighbor. Looking SW.

high water mark (approx. 10"

It appears that flow was trying to flow back south but was partially trapped by high ground behind the house.
Sand trap behind 11925 E. Barbary Coast Road. 205-50-0750. Elevated area of golf course appeared to push flow south. Looking ~N.
Behind 11925 E. Barbary Coast Road.
205-50-0750. Elevated area of golf course appeared to push flow south. Looking S
Behind 205-50-160H. Portion of large pile of debris reportedly placed by golf course. Debris may be on Pima County property. Looking ESE.
Behind 205-50-160H. Portion of large pile of debris reportedly placed by golf course. Debris appeared to prevent water from rejoining main flow. Debris may be on Pima County property. Looking S
Behind 205-50-160H. Portion of large pile of debris reportedly placed by golf course. Looking SE
Behind 205-50-160H. Portion of large pile of debris reportedly placed by golf course. Looking SSW.
Behind 205-50-160H. Portion of large pile of debris reportedly placed by golf course. Looking ~W
Behind 205-50-160H. Portion of large pile of debris reportedly placed by golf course. Looking W
Behind 205-50-160H.
Portion of large pile of debris reportedly placed by golf course. Looking SE
Behind 205-50-160H. Debris in fence. Looking SE

Tanque Verde main channel

flow?
Behind and between 12510 E. Barbary Coast Rd. (left) (205-50-1090) and 12518 E. Barbary Coast Rd. (right) (205-50-1100)
Looking ~N
Behind and between 12502 E. Barbary Coast Rd. (left) (205-50-1080) and 12510 E. Barbary Coast Rd. (right) (205-50-1090) Looking ~NNW
12510 E. Barbary Coast Rd.  205-50-1090

12518 E. Barbary Coast Rd.  Leavitt property.  Home flooded.  205-50-1100  Looking ~NE

flow
12510 E. Barbary Coast Rd.  205-50-1090
Looking ~NNE

flow