

Tom's Creek Survey Summary Neighborhood Site Visits July 2013 and August 2016

| Mtg. | Year | Address | Typical damage during flooding | Worst damage and when | Factors you feel contribute to flooding | Suggestions for correcting | Flood Insur. | Comments |
|---------|---|-----------------|---|--|---|--|--------------|--|
| Date | | | | | | | | |
| 7/16/13 | 1993 | 100 James St. | Yard under water and remains soggy for days Low areas pond water for days, does not get in house. | 30 " water in lower level of home Lost fridge/dryer/stove - 6-30-13 | OWASA filled easement higher than yard Creek narrows just before culvert | Straighten/enlarge stream near culvert | Y | Owner backfilled property 1995 to raise level of backyard |
| 7/16/13 | 1992 | 102 James St. | About 3 times per year water in storage shed | 6-30-13 shed floated up into yard | Building that has occurred. Concern about future development. | Change elevation so this side of creek is higher. | ? | No water in house since she has owned it starting in 1982, |
| 7/16/13 | 1984 | 104 James | 4-5 times per year flooding in rear yard up to shed | Fran 1996 and 6-30-13 water cam with 4-6 ft of residence. | Debris build up/meandering channel | Redefine street/widen and deepen. | N | Hope town finds a solution. |
| 7/22/13 | 1973 | 107 Melba Cir. | Typical damage is erosion. She had creek cleaned in 1980s and Added rip-rap. Seems to be holding. | 6-30-13 Block retaining wall washed out. Damage to red fence over years. | Debris in creek. Seems to be more flow since Cates Farm dev. | Dig out creek and straighten. Keep it clean. | N | |
| 7/22/13 | 1981 | 115 Carol St. | 1-3 times per year. Flooding of rear yard area. Some trees undermined and need to be removed. | Fran 1996 and 6-30-13 water cam with 4 -6 ft 6" depth of water in downstairs living area | Upstream development - McDougal and Post office. | Need closer scrutiny of development. | N | |
| 7/22/13 | 1973 | 400 Lorraine | 2-3 times per year. Loss of vegetation and landscape timbers. | 6-30-13 - Water entered crawl space. HVAC unit , hot water heater both damaged | Building of new homes, new construction, | Feels creek should be clean out | Y | |
| 7/22/13 | 1993 | 208 James St. | 6 times per year. Flood of yard. No structure or plantings damaged. | 6-30-13 - water within 16' of storage shed. Water did not get to residence. | Creek not deep enough, too much debris. | Redefine creek channel. Clean up debris twice per year. | N | Water came over James St. from west and ran down into their yard. |
| 7/30/13 | 2012 | 116 Carol St. | 3-4 x in May Comes up quickly and goes down quickly. One large tree has fallen due to roots softening. | 6-30-13 About 24 " of water in lower level. Electronic business equipment damaged. | Water can't get thru culvert. Debris on May20th may cause blockage. | Pd. for Eng. Report that indicates culverts should be enlarged to meet Town Std. | Y | Perhaps remove culverts entirely. |
| 7/30/13 | 2002 | 214 James St. | About twice per year flooding of non-maintained area. Leaves and stick debris remain after event. | Not from creek but water coming into crawl space from water coming over James St. | Did not record any comments | Did not record any comments. | N | |
| 7/30/13 | 2005 | 302 Simpson | About once per year water comes out of banks. No yard damage or structure damage | 6-30-13 - lower TV dish near creek went partway under water losing reception. | Did not record any comments | Did not record any comments. | N | Experienced overland flooding from up-hill. Washed across yard. |
| 7/30/13 | 1999 | 118 Carol St. | 4 x btw. Aug. 1999 and Sept 2012 extends about 10 from bank leaving debris. x btw. Sept. 2012 and 6-30-13 | 6-30-13 worst. Water entered crawl space. Dambe to insulation, heat pump, vapor Bar. | Undersized culvert, increase run-off from upstream dev.. | Enlarge roadway culvert or lower roadway. | Y | Should culv. under Carol comply with current standards? Cost? |
| 7/30/13 | 1984 | 300 James St. | Typically not out of banks. Mo damage with typical flood. | 6-30-13 seemed to be worse than Fran (1996) No damage. | Development in watershed | None suggested. | N | |
| 7/30/13 | 2002 | 201 Rainbow | No damage with typical flooding | Flood waters got to basement door but not in basement. Damage to ancillary struct. | McDougal School. Other Development in watershed. | Anything that will benefit all that were flooded. | Y | |
| 8/7/13 | 2010 | 103 Dove St. | No impact to residence structure. Displaced driveway stone and landscaping. | More extensive than typical event. No impact to residence. | Private property is lower than back slope of roadway ditch at culvert. | Increase driveway culvert size or evaluate elevation of ditch. | N | None |
| 8/7/13 | 1987 | 200 Rainbow | No property damage during typical flooding aside from some vegetation damage and washing of gravel. | 6-30-13 - worst flooding experience. Water 2 ft. high on heat pumps, Crawl space flooded | Notice higher water since McDougal built. Water ran across rainbow drive. | Increase culvert size under Rainbow Dr. may push water downstream and impact ? | | Concerns about future dev. Lloyd Sq & MLK Park. |
| 8/27/16 | Back Yard and entrance to home flooding | 301 Rainbow | Up to garage door on multiple occasions | Construction up hill - Lloyd Square | None suggested. | | | Back yard is a natural tributary to Tom's Creek |
| 8/27/16 | 2015 | 104 Quail Roost | Water within inches of crawlspace in 2013. Water overtopped 6' embankment and overflowed Quail Roost. | Too small and clogged culverts | | | | Natural stream in side/front yard. Previous work performed in back yard by previous owner to keep water from home. Minor improvements are necessary. |
| 8/27/16 | | 201 Rainbow | Items float away but not structural damage to elevated home | Water once reached the base of a downstairs storage room. Hot tub has also floated away. | Landscaping debris not collected and clogging culverts. Lloyd Square and removal of trees. | Increase maintenance of culverts and dispose of landscaping debris. | | House construction approval required home to be built on stilts since footprint in in natural floodplain. Owner believed there is an increase in occurrences and severity of flooding. |
| 8/27/16 | | 411 James | Front and back yard flood | | Neighbor's elevated sewer and clogged stormwater grate in front yard | Keep grate clean and remove elevated sewer | | It appears to be a natural tributary in the back yard. We need to investigate impacts of elevated sewer. |
| 8/27/16 | | 400 James | Water overtops James and floods front yard. | Water reached foundation but not into home yet. | More impervious area in Town results in more water flowing downstream Duke power culvert in back yard broken/clogged | Open up stream bed in side yard which has filled with sediment Correct broken culvert | | Broken culvert is actually holding up water from 200 Rainbow by creating a dam. |

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| 8/27/16 | 200 Rainbow | | Washes away landscaping, trash containers | Flooded HVAC and tools in shed (lawnmower, etc) | McDougal School, MLK Park, Lloyd Square Tributaries intersect near property adding to water amounts | clean out and deepen ditches, reduce future development | Y | The street acts as a stream during moderate to heavy rains. |
| 8/27/16 | 115 Carol | 1981 | Yard floods 3-4 times per year | Water into crawl space and basement - \$4-5K damage | Climate change and McDougle Elementary | Comprehensive replacement of culverts | | Owner has installed french drain, gutters and tile in basement. |
| 8/27/16 | 116 Carol | 2012 | Typical storm water reached edge of patio; 7-8 times per year | Water has come inside of house (the deepest occurred with the 6/30/2013 storm and reached a depth of approx. 27"); 5 floods since end of 2012 (all storms have been documented and sent to Town Manager since 2013) | Water comes from the creek, overwhelms Culvert, overland flow | Replacing culvert would be beneficial | Y | Work has been performed by current and previous owner to improve drainage. Property is approved for purchase by FEMA grant. |
| 8/27/16 | 118 Carol | 1999 | Water has come under her deck and into the crawlspace at least 8 times (3 in 2016, 2 in 2015, 2 in 2013, and in 1999 during Hurricane Dan/Floyd) Creek overflows quickly and with less rainfall than before (inch or less) | Crawlspace, landscaping, house settles/sinks on foundation, and items under deck (tools, bikes, etc.), potential mold The ephemeral stream in Ms. Linnan's back yard carries water from James Street and the Stenross side of the property down to Tom's Creek. The 2013 storm carried enough water to capsize a log rack filled with firewood that was located on the back wall of the house. | Culverts not up to code (can't handle water flow), runoff upstream, more intense build-up/erosion, and lack of maintenance | Fix culverts up/down stream, regular maintenance on the creek, dig creek bed deeper/wider, don't approve any more development if run-off will exacerbate problem | Y | Work performed: sump pump, moisture barrier |
| 8/27/16 | 120 Carol | 1988 | Tom's Creek overflow is approaching NE boundary of property and road floods | | Stormwater from McDougle was engineered to flow towards Plantation Acres, Lloyd Square homes do not connect to retention pond because it's incorrectly engineered (only 1 or 2 houses connect), and infill, clear cutting, and removal of trees and leaf litter have produced runoff | Do not pave Lloyd Farm, fix Lloyd Square pond, enforce maintenance of storm sewers (pipes are filled with silt), make real ditches and understand how they should be maintained, get a sump truck, discourage or create policy to reduce tree removal and encourage leaf litter | | Work performed: French drain and 2 small catch basins, gutters and rain barrels, tree canopy maintained, leaf litter kept in wood lot (\$3,000) |
| 8/27/16 | 216 James | | Water comes from James Street and gushes in a hard rain, washes down the driveway. Has to replace driveway gravel. Grass at the bottom of the driveway has been washed away. | With heavy rains the creek floods onto the natural area at the back of the property and knocked over neighbor's fence across the creek, roots of trees exposed on the opposite side of the creek. | Water not draining from James St | Concerned with Lloyd Farm development causing more rain overflow on James Street to flood our property. | | Work performed: gutter and drains |
| 8/27/16 | 206 James | 1993 and 2016 | Mrs. Christmas is the owner of 208 James, but reported for 206 James. 208 James is not a property with any flooding problems. We received the names of the residents at 206 on a separate piece of paper, an email and contact info. Last name is Rodriguez, first name Jose | Water has gone inside the home, 4-5 inches in the basement | Concerns with Lloyd Farm development causing additional impacts | | | Work performed: used weed killer in whole yard to kill stilt grass |
| 8/27/16 | 301 Carol | 1992 | Yard floods multiple (2+) times a year Part of her driveway has washed out | Water has reached foundation but not yet entered home | Flooding comes from Lloyd Farm and from ponds across the street (306 Carol turns into a river) | Deeper channels around the property would be helpful | | Has put in a French drain, berm, work to clear ditch - \$7,351 in expenses |
| 8/27/16 | 211 Carol | 2004 | Water has flooded most of the back and side yards close to house but not to it - 2x per year | | Flooding comes from Lloyd Farm and across the street, over the road and through the culvert | Believes culverts that can handle the water flood need to be put in, routine maintenance of culverts, and deeper ditches | | Sump pump installed |
| 8/27/16 | 209 Carol | 2010 | Yard floods 3-4 times per year | | Comes from Lloyd Farm, obstruction in creek behind yard, and across the street (flows from his neighbor at 211 and into his back yard) | Suggests digging a ravine or trench in ROI beside house at 211 Carol. Suggests looking at the current zoning of Lloyd Farm and see if rain runoff was part of the reason for the current zoning | | Believes in 5 years the creek behind his house will be a stream |
| 8/27/16 | 207 Carol | 2013 | Water comes from culvert and over the road on a regular basis. | Water comes up to her side fence from culvert on the left side of house. Has gone through part of her crawl space on right side of house | | The drainage creek has silted up and believes digging a deeper drainage creek would help | | Has relined crawl space |

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| 8/27/16 | 205 Carol | 1999 | Water comes up to the flat area in backyard | | Comes from Lloyd Farm in the back and drainage creek on the side Is concerned new construction in Lloyd Farm will exacerbate issue | Believes keeping the creeks clear will help with the flooding | | Has put in a French drain, planted river cane along drainage creek, and built up a mulch area in back yard close to house |
| 8/27/16 | 200 Lorraine | | Experiences pooling of water | | Undersized pipes | | | |
| 8/27/16 | 100 Phips | | No water intrusion in house; yard gets saturated - mosquitos from standing water | 2013 - Flooded downstairs, carport and crawlspace | | Curb installation | | 8" pipe installed, \$30K spent on sump pump and sealed walls |
| 8/27/16 | 303 Lorraine | | Standing water from drainage problem | Street frequently becomes conduit for water | Driveway pipes in bad condition from erosion More frequent and higher volume rain episodes | SW management plan | | Refurbished driveway |
| 8/27/16 | 102 Mary | 2002 | | Feeder stream between 102 and 104 Mary St. overflowed. Fence posts and streamside trees have eroded from banks during flashflood | Climate change, increased development replacing trees, silting of drainage ditches, new residents removing trees. | Town think in terms of watersheds instead of private property, town rethink infill policies, town slow the flow of uphill runoff, town engage in better education about the water retention value of trees | | \$8K spent sealed crawl space, whole house dehumidifier, added native plants and trees |
| 8/27/16 | 100 James | 1993 | Yard floods every time it rains | June 30, 2013. Water in basement 3-5 times/year | Construction (post office, school), cutting marshland and backfilling with homes | Widen and deepen Tom's Creek downstream, larger culverts | | 13 truck loads of dirt in back yard, installed 3 sump pumps. |
| 8/27/16 | 202 James | | | 2013 flood reached shed but not home. | | | | |
| 8/27/16 | 400 Lorraine | 1976 | Ditches clog, bank erosion | | | | | |
| 8/27/16 | 101 Melba Circle | 2009 | | The drainage ditch along Lorraine Street is silted up from Melba Circle to the driveway culvert at 400 Lorraine Street. There is a permanent pool of water standing in the culvert under Melba Circle because the drainage ditch below Melba does not drain to Tom's Creek. This standing water is a breeding ground for mosquitoes, which is a health hazard. | The culvert on public right of way under the driveway at 400 Lorraine Street below my property is silted up and blocks efficient flow of water from Melba Circle to Tom's Creek. There is a levee or berm on the public right of way between my property and the drainage ditch that prevents rainwater runoff from my property from reaching the drainage ditch. | The Town of Carrboro has not maintained the drainage ditch that borders my property along Lorraine Street below Melba Circle. Since I bought this house in 2009 the Town has not dredged or graded this ditch, or otherwise maintained this ditch to ensure that rainwater runoff flows to Tom's Creek. The Town does not regularly mow or clear leaves and debris from the ditch and the surrounding public right of way | | |

The water's edge for typical flooding and the water's edge for the worst flooding were noted on a map. Photos also taken or provided.