

Drainage/Flooding Situations that are not sufficiently addressed:

1. Filling of property with no permit.
 - a. Does either City or SJRWMD inspect and enforce? How and what are penalties?
 - b. Are residential lots exempt?
 - c. Is JEA Exempt? Is FDOT exempt?
2. Filling of property with no immediate plan for construction but SJRWMD permit- does City regulate? or just SJRWMD?
 - a. How is adjacent flooding addressed
3. Property filled with City and SJRWMD permits, but drainage system not installed or incomplete
 - a. Are there requirements for temporary interim drainage solutions? Consequences?
 - b. Are there time frames for completion of the approved system? Bonds? Consequences?
 - c. Who inspects
 - d. What if system not installed as designed? Consequences?
4. In Flood zones, FEMA requires height of new structures to be above flood elevation. This results in new subdivisions located in flood plains being filled in order to provide usable lots for residents.
 - a. Since we do not regulate % impervious surface, what is the design standard used for pre/post retention? We are allowing 60% lot coverage of buildings plus driveways/patios, etc. on top of that.
 - b. Who verifies the quantity of offsite drainage that the former wetland provided to adjacent parcels?
 - c. We know SJRWMD allows mitigation credits to offset impacts of fill, but doesn't the filled area impact water quality of adjacent waterways? Don't we lose the filtration value? Can filtration be built into design criteria?
5. Who regulates erosion control, siltation issues, during construction? How do we enforce violations that impact adjacent properties and downstream waterways? If we end up having to dredge at significant City expense, this is no small issue.
6. Maintenance post construction is a problem.
 - a. How can we insure systems are maintained and continue to function? Inspections? Certifications?
 - b. Swales at lot edges on residential lots are often filled and obstructed- how can we prevent? If not inspected regularly, should they be disallowed?
 - c. Small homeowners association have no resources to address expensive system failures- what can we do to insure their capacity to maintain?
 - d. Consequences for failure to maintain?

7. Design criteria fail to account for impacts of tides in river in recent years and render systems dysfunctional.
 - a. Am I correct that drainage to the river is designed off existing outfall heights? Do we require backflow preventers? Do we design for frequency of events where the system will not have positive flow? Do we require pumps? How do we change criteria?
 - b. In one subdivision, drainage was permitted into a natural marsh connected to the river but the marsh is privately owned. How do we insure that the marsh is not filled with debris or obstructed? How do we insure it is not filled?

8. The Land Development Procedures Manual provides that Public Works requires evaluation of the downstream system capacity and its ability to accept drainage from new development. Have we ever required anyone to improve downstream capacity of the system or denied a permit because of downstream capacity?

9. Floodway is defined in the Comp Plan as the channel of the a river or watercourse and its adjacent land areas that must be reserved in order to discharge the base flood without increasing the surface water elevation by more than 1 foot.
 - a. How is this provision enforced? We see many waterfront developments in LUZ, but never any discussion about the cumulative impacts on the floodway. Doesn't filling one property after another impact the capacity of the floodway and floodplain?

10. The Comprehensive Plan has criteria for drainage Level of Service similar to roadway levels of service. However the acceptable standard in the comp plan seems to be far lower than what is acceptable to residents.
 - a. These standards define" the depth of flooding allowed and adjacent to the street rights of way ... based on a 5 year design storm (20% chance per year
 - A For new systems -lowest roadway at or above 25 year design elevation
 - B For retrofitting an existing system: Flooding of streets and some yard areas but contained in the ROW
 - C For existing system: flooding up to the finished elevation of structures
 - b. So what is failing in existing areas or is there no failing?