

Imperial IRWMP Scoping and Review of CDWR's Resource Management Strategies

6.1 Improve Flood Management

The 2009 California Water Plan Update includes a number of Resource Management Strategies to address flood and stormwater management.

During initial stakeholder interviews and subsequent evaluation of Disadvantaged Communities (DACs) needs, the communities in the Imperial Region identified stormwater management as a high priority to convey water from developed areas, reduce localized flooding, and improve economic development potential within the urban areas. The Projects Work Group discussed stormwater and flood control issues in the early meetings, and special Flood/Stormwater Workshop was held in May of 2011 to develop findings and recommendations. The findings and recommendations were introduced to the Water Forum in June 2011 without action.

For purposes of the IRWMP the Urban Runoff Management and Flood Risk Management were integrated into the IRWMP Improve Flood Management grouping of strategies. The Imperial IRWMP seeks to integrate water quality benefits into any project and programs related to urban runoff management.

6.1.1.1 Findings

- Stakeholder Assessments and DAC Needs Analysis have documented localized stormwater and runoff issues and an awareness of the need for regional solutions.
- Economic development of the planned urban areas will be constrained without management structures, capital facilities and funding mechanisms to provide regional localized drainage solutions and benefits.
- The Preliminary Drainage Master Plan prepared by IID and other city or county master plans that exist or are in preparation provide a basis for discussion of structural solutions; and for development of project priorities for engineering of regional drainage facilities.
- IID, Imperial County and the Cities cannot solve flood and stormwater management problems independently. The lack of a regional organization with a stable funding mechanism and a clear mission is the largest constraint to solving stormwater and flood problems.
 - IID is not chartered as a flood control district. IID has drainage facilities that meet their intended design purpose within the service area. These facilities could provide the underlying infrastructure which could be improved to provide additional regional stormwater benefits and solutions to the developing areas.
 - The Cities will develop and have the potential to increase runoff and create water quality issues unless mitigated. The Cities have the largest need for improved regional stormwater management and conveyance, but do not have authority or

capacity to deal with regional drainage or manage areas outside of their jurisdiction.

- Imperial County has the broader regional mission, powers and authorities; over the larger geography of the Imperial Region.
- The land use authorities have the ability to require improvements, condition new development and make exactions to develop stormwater facilities and mitigate for increased runoff or water quality impairments.
- Imperial County has the appropriate jurisdictional authorities to take the lead in formation of a regional flood control district, or of a joint powers authority to combine land use authorities of the County and the Cities to address both urban stormwater runoff, and the larger regional flood control issues.
- IID, Imperial County and the Cities all face financial limitations. Competing for funding within the Imperial Region, and not combining resources and authorities to address the issues, will limit the ability to successfully obtain grant funding and compete with other regions.
- CDWR funding is available through the Imperial IRWM Stormwater Flood Management (SWFM) grant program; however, it will require 50 percent cost-sharing by the local region and the local funds must be secured or in place in advance of applying for 50 percent matching funds from CDWR.

6.1.1.2 Recommendations

1. Use the Water Forum's process to evaluate and set up a framework for a regional flood control district, including evaluating alternative institutional structures, management programs, funding mechanisms for project solutions to stormwater and flood control.
2. Imperial IRWMP should seek to include both program solutions and potential integrated stormwater/flood projects that would qualify for CDWR's grant funds under Propositions 84 and 1E, and serve to demonstrate regional stormwater planning concepts.
3. The Imperial IRWMP Projects Work Group should have sessions that focus on preferred projects for the region that can collectively reduce flood damages, show multiple objective benefits and be competitive in future SWFM grant solicitations. One or more of those projects could be singled out as a regional stormwater retention project or similar flood reduction project.
4. Identify a regional stormwater retention project to serve as a case study and demonstrate economic costs and benefits of regional facilities planned in advance to serve developing areas.
 - Fund through an MOU of multiple partners willing to provide the local match and document the approach.

- Provide basis for future planning efforts aimed at detailed study of the populated development areas in Imperial Valley to identify specific drainage system improvements and provide a model for how the Cities, county, and IID can coordinate.
5. Initiate high-level policy discussion between select members of the County Board of Supervisors, IID Board of Directors and representatives of City Councils to engage elected representatives in creation of a legal entity and formation of a Flood Control District or Joint Powers Authority (JPA). This larger entity will likely be needed to secure region-wide funding that benefit more than one single local water supply or one local storm water interest.
 6. The IRWMP should lay out a program that can be phased in over time. The Water Forum's implementation should consider the following:
 - Possible loss of life or injury to people would take precedence over major property damage, while major property damage should take precedence over occasional flooding which results in inconvenience and annoyance;
 - More highly developed areas should be protected prior to less developed areas;
 - Main drains which serve as collectors for tributary reaches should have priority over more localized reaches.
 - Improvement of a downstream reach would have priority over an upstream reach.
 - Thorough regulatory and legal reviews should be performed to determine the implications of the existing drain system in the potential formation of a flood control district.
 7. Develop a Hydrology Manual or similar set of standards that would define consistent methods for engineering evaluation of pre- and post- project runoff. This would help during development review, defining retention requirements, and sizing facilities. It would also support regional analysis of runoff for each of the drainage areas contributing to storm flow to the watershed areas drained by IID facilities, New River and Alamo River.
 8. Develop stable funding needed to: a) establish the program and needed policies, b) draft engineering plans and prepare engineering report to seek voter approval for a benefits assessment zones; c) implement programs approved by voters.
 9. Any regional funding program for multiple agencies will likely require a significant public outreach component, particularly if the regional agency will be securing local cost-sharing funds through a Proposition 218 Assessment or other similar means.