

**Flood Control  
Advisory Board**

**WELCOME**

**October 26, 2016**



# Agenda

- 1 Call to Order
- 2 Pledge of Allegiance
- 3 Approval of the August 24, 2016 Minutes
- 4 Election of Officers
- 5 Appointment of FCAB Standing Committees for 2017
- 6 Water Conservation Program Update
- 7 Comments from the Chief Engineer and General Manager
- 8 Summary of Recent Actions by the Board of Directors
- 9 Other Business and Comments from the Public





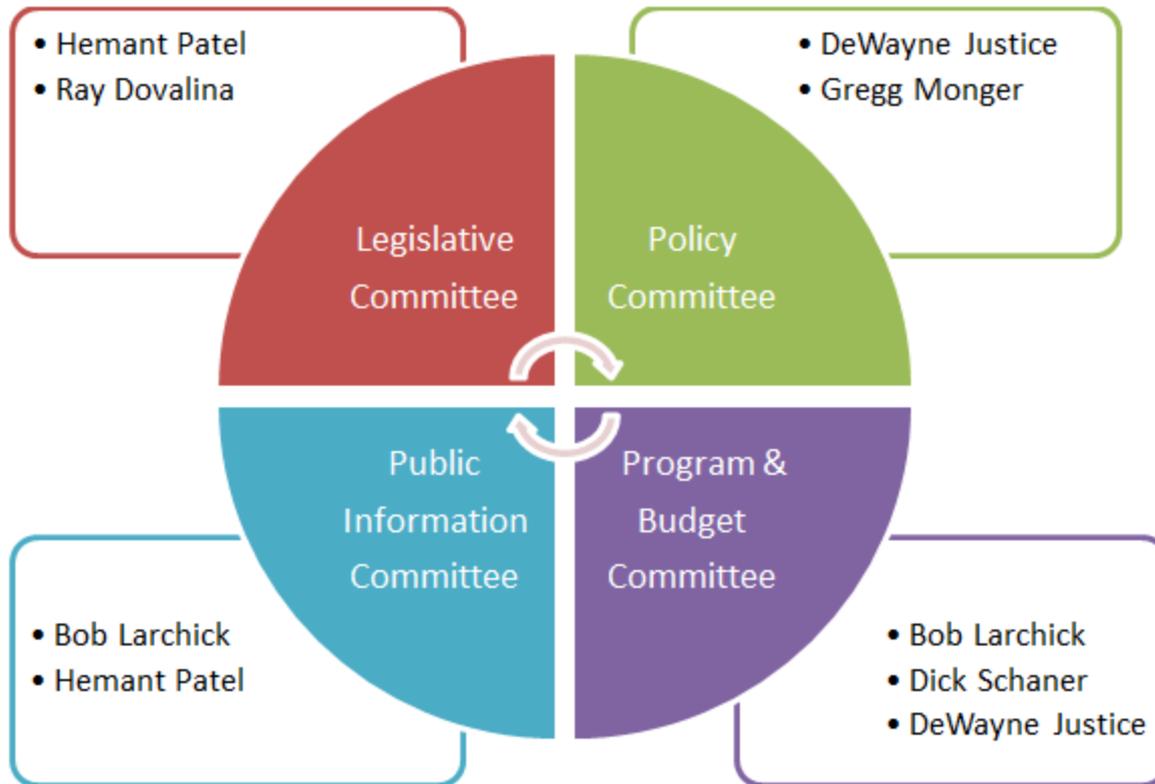
# **ELECTION OF OFFICERS**

- **Chairman** – *Dick Schaner*
- **Vice Chairman** – *Gregg Monger*
- **Secretary** – *Hemant Patel*





# Appointment of FCAB Standing Committees





# Water Conservation and Flood Control

**Harry R. Cooper, RLA**

*Landscape Architecture and  
Water Conservation Branch Manager*

# Definitions



## **Water Conservation:**

*“Beneficial reduction in water loss, waste or use”*

~ Amy Vickers, *Water Conservation*

# Definitions



## Green Infrastructure (GI):

*"...is an approach to water management that protects, restores, or mimics the natural water cycle"*

~ American Rivers

# Definitions



## Low Impact Development (LID):

*"...is a sustainable approach to stormwater management that utilizes the landscape to absorb storm runoff, reducing offsite flows that can contribute to flooding and infrastructure costs"*

~ LID Toolkit, City of Mesa 2015

# Current Conditions



- 17-year drought
- Continued population growth
- Over-allocation of Colorado River water and Lake Mead's 'structural deficit'
- Shortage Declaration by USBR within the next two years

# Flood Control Challenge



- Reductions in Colorado River water = increased groundwater pumping
- May cause land subsidence - putting District structures at risk of failure and increasing the risk of flooding

# Bigger Challenge



*Without a secure supply of water, there is no economic growth*

# Flood Control Involvement

- Reduces risk
- Reduces costs
- Includes funding opportunities
- Is the right thing to do



# Authorizations

## Arizona Revised Statutes – Title 48

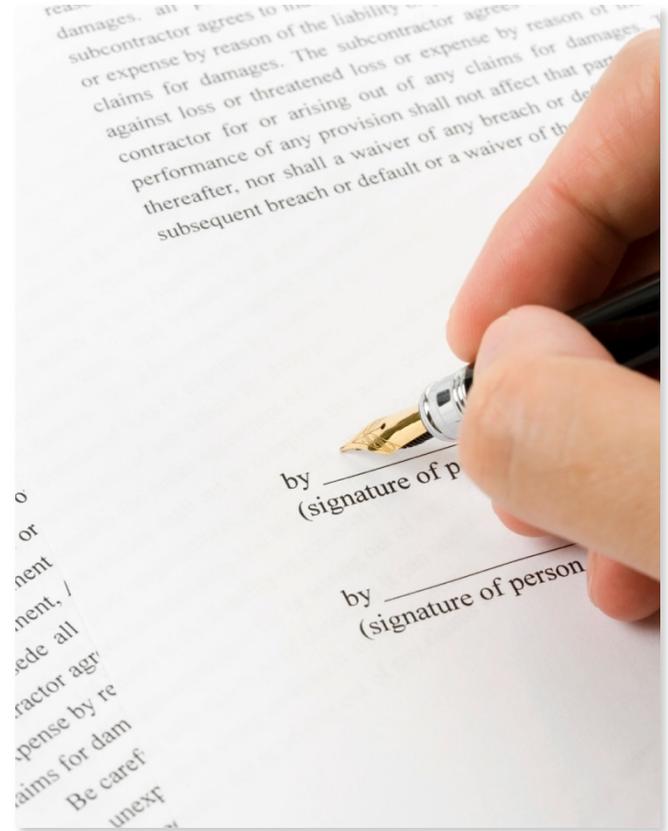
- ARS 48-3603 – construct, operate, maintain, fund and partner

## Recharge Resolutions

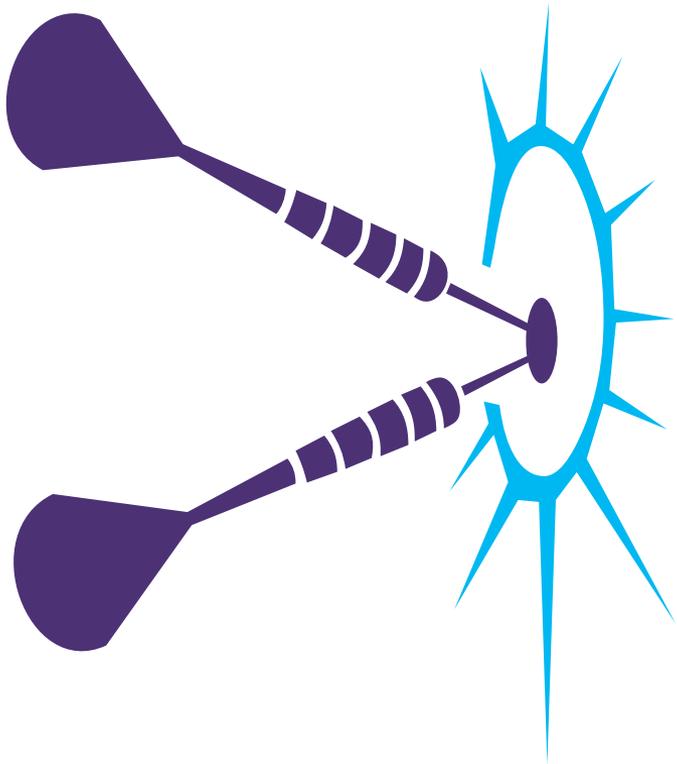
- *Policy for Conducting Groundwater Recharge, Replenishment or Underground Storage on Land Leased from the Flood Control District, 1995*

## County Strategic Plan 2017-2022

- Includes water conservation goals



# Strategic Goals



**Goal 1:** By 2022, the District will achieve a 50% reduction in water usage on FCD landscaping from 750,000 gallons in 2014, thus reducing overall water usage

**Goal 2:** By 2022, the District will evaluate all new structures and 50% of the 83 existing structures for potential water conservation measures and (implement those measures) on at least 5 of the new or existing structures

# Key Initiatives

- Evaluate District policies and manuals
- Promote use of “tall pot” native tree growing technologies
- Educate design professionals, District staff, and the general public
- Integrate water conservation strategies as a standard design goal



# Durango Campus Master Plan

## Water Conservation Retrofit:

- Reduce potable water use on landscaping by 50%
- Reduce costly maintenance
- Become an educational showcase



# Drainage Policies and Standards

- **In 2016** – General update to include language encouraging water conservation
- **In 2017** – Detailed review of policies and standards to increase use of low impact development techniques



# ASU's Decision Center for a Desert City (DCDC) Internship Program

## Spring 2016

- Intern helped develop of water conservation evaluation criteria

## Spring 2017

- Requested two interns to assist in:
  - Native tall pot tree monitoring
  - Water budgeting/planning

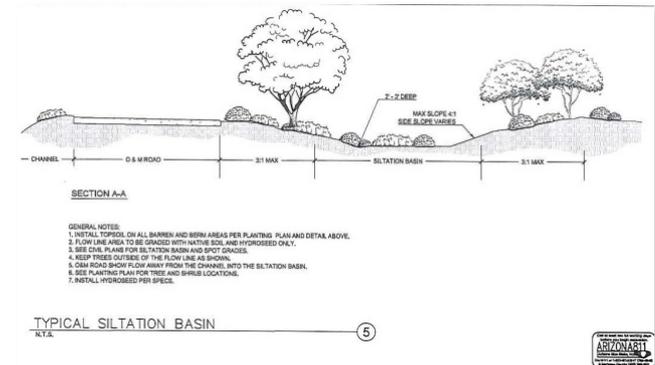
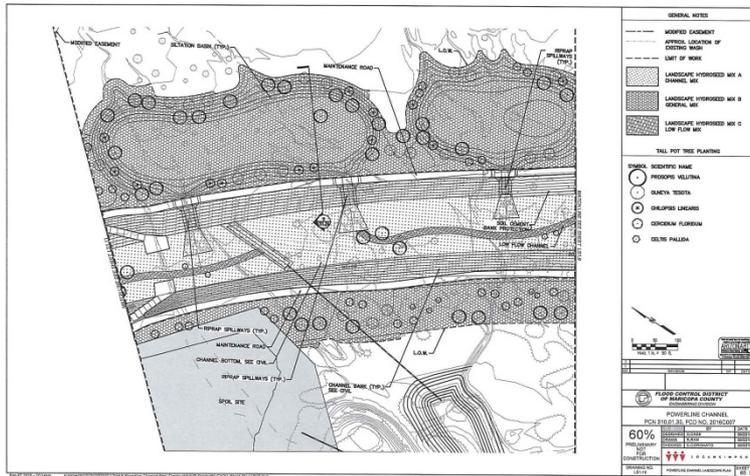


# Flood Control Projects



**McMicken Outlet Channel**

# Flood Control Projects



Powerline Channel



# Collaboration and Funding

**Federal:** US Bureau of Reclamation, EPA, NRCS

**State/Regional:** ADWR, AZ State Forestry Department, SRP, CAP, WESTCAPS (West Valley CAP User Group), Maricopa County Parks, ASLA

**Local:** Town/Cities of Gilbert, Peoria, Surprise, Tempe, Phoenix, Scottsdale, and Glendale

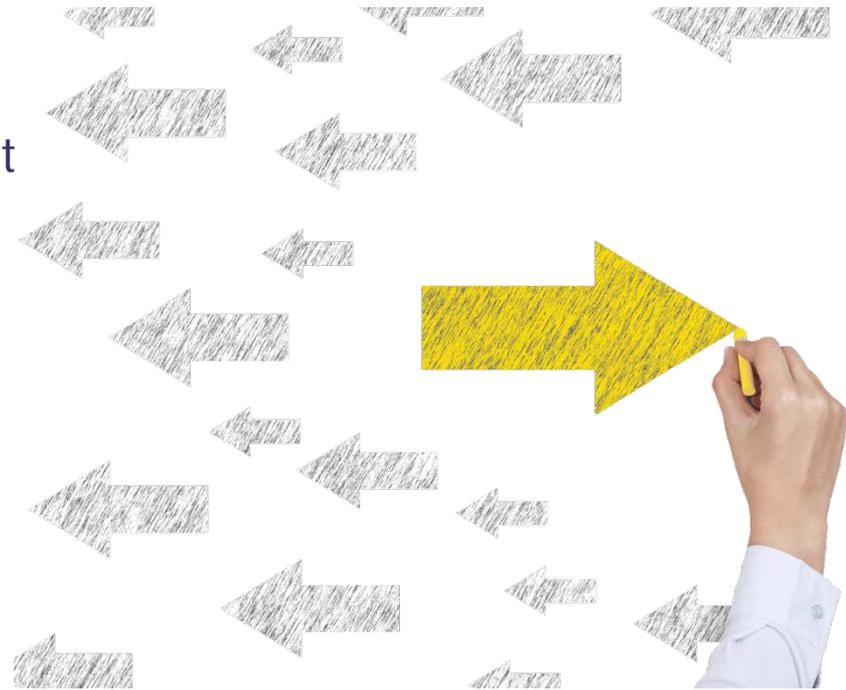
**Non Profit:** The Nature Conservancy, Watershed Management Group

**Academic:** ASU's Sustainable Cities Network and Decision Center for a Desert City



# Moving Forward

- Draft Recharge Resolution
- Cooperative agreements for public agency collaboration with native tall pot tree nursery
- Evaluation of District structures
- GI/LID handbook as compliment to Drainage Policy and Standards Manual
- Next level evaluation of policies, etc.
- Conceptual master plan for Durango water conservation retrofit by end of FY17



# Questions?



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Water Conservation Branch Manager*

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# **Comments from the Chief Engineer and General Manager**





# Summary of Recent Actions By the Board of Directors



**Denny Barney**  
District 1



**Steve Chucri**  
District 2



**Andy Kunasek**  
District 3



**Clint L. Hickman**  
District 4  
**- Chairman -**



**Steve Gallardo**  
District 5

# **Other Business and Comments from the Public**

