Assessment of LID Handbook Integration into Valley Projects and the Impacts of GI/LID in the Arid Phoenix Metro Region
Literature Review

• Bioretention/swales are highest functioning and best investment
• Research is inconclusive on filtration
• Green spaces are vital to environmental health in urban areas
• More trees and native vegetation will help cool urban areas
Study Objectives:

- Interview municipalities and developers
- Understand how communities feel about GI
- Assess the effectiveness and usefulness of the LID Handbook
- Create a database of current GI in the valley
1. When was GI/LID implemented on your site?

2. Have you noticed any changes due to the LID/GI (ex. More or less flooding, more or less maintenance, etc.)?

3. Have you had any problems with the GI/LID on your site?

4. Would you recommend adding similar GI/LID to other projects?

5. Do you have any mechanisms in place to teach people about your GI/LID (ex. New employee training, maintenance training, informational plaques, etc.)?

6. Do you have any other thoughts about GI/LID?
10 designs with specifications
- Released in 2019
- Collaborative effort of SCN and regional municipalities
- Scottsdale received WIFA grant and lead development

LID Handbook
Common Themes Amongst Municipalities

1. MAG Adoption
   Standardization will give the green light to private developers to use GI.

2. City Code
   Most codes require a variance to implement GI which is a deterrent.

3. No Space
   GI requires space which is in short supply in city centers and around the ROW.

4. It's dry here
   There is no real argument against using the water we do get as supplemental irrigation.

5. Private interest
   Creating interest in the private sector is vital, but there is little encouragement from municipalities.

6. Knowledge
   GI is specialized, and bad implementation can make a project ineffective. It’s difficult to find the expertise.

All structures need maintenance anyway, GI is just a different way of doing it.

1/3 of MAG cities interviewed
**Conservation**
- Use what little water we get
- Less irrigation & landscape water waste
- Aesthetics
- Co-benefits

**ROW is complicated**
- Not much space
- Retrofitting is complex
- Liability
- Cities are risk adverse

**MAG**
- Adopting standard specs
- MAG standards will encourage developers
- Could still be 15-20 years for real change

**City Engineers**
- Resistant to change
- Risk adverse
- Liability adverse
- Not well educated in environmental benefits
Bioswales and Curbcuts

Mesa Urban Garden

Glendale Park and Ride

ASU Downtown Taylor Mall
Permeable Pavers and Porous Concrete

Glendale Park
and Ride

Taylor Street
ASU

Franciscan
Renewal Center
Curb Cuts

Manzanita Park

Helios Education Center

Fiesta Mall Mesa

FCD Campus
Where do we already have GI?
Questions?

Thank you to all participants!