TRADITIONAL IRRIGATION DEVELOPMENT

Open Space:

- Emphasis on High Water Use Landscapes
- Paired with unsupportive soil structure & chemical support which degrades over time

Control:

- · Unmanaged individual control
- · Lack of visibility or coordinated accountability

- Average overwatering of 60%+
- Inability to adjust to meet actual plant/weather requirements
- Diverts potable water for plant use which is lost to municipal treatment cycle at high

SITE SUSTAINABLE RESIDENTIAL WATER SUPPLY

Site Sustainable Approaches to Irrigation are made possible through development of private, secure, non-potable water development projects which facilitate:

- Maintenance of the natural water cycle
- Alignment of Landscape & Geography
- Hydraulic Utility Engineering paired with Community Managed Technology
- Visible, Trackable Water Use aligned with Natural Precipitation





MAINTAIN THE NATURAL WATER CYCLE

- Utilizing non-potable water supplies for irrigation water use provides beneficial use for landscape support
- Stream flows are maintained & hydrogeologic cycle supported
- · Less commonly used raw water supplies can be brought into consistent use for irrigation supply
- Chemically treated water is not applied to landscape & soils



ALIGNMENT OF NATURE & GEOGRAPHY

- Non-potable water balance is established & aligned
- Irrigation water balance is used to direct Landscape typologies, quantities, maintenance requirements, & soil specifications
- Landscapes can be aligned natural & adaptive specification matching local, native planting types
- Use of high water use plant materials can be selective & targeted







UNIFIED HYDRAULIC **ENGINEERING & MANAGEMENT**

- Engineer irrigation systems for long-term use & low-cost management
- · Community-Wide management of Lightweight, inexpensive, cloud-based technologies paired with well organized systems
- · Provide immediate visibility with accountability for maintenance personnel management





SIGNIFICANT WATER SAVINGS

- Well Engineered systems cost less to build, construct, & maintain
- Native & adaptive landscapes utilize 50% less water
- less water

 Community management in routine &
 drought conditions provides upwards of
 28% savings

 Provide immediate visibility with
 accountability for system repairs
 maintenance & casualty events generates
 22% savings

 Dramatic savings by reducing the
 dependence on treated water for
 landscapes

 Community managed, native planted
- Community managed, native planted irrigation requirements utilize 40% less water per lot than typical
- Removing irrigation from the municipal water supply decreases demand by 65% per lot



demand from residential supply



