Arizona Growing Water Smart:

**Community Self-Assessment**

### **Introduction**

The very first step in becoming water smart is understanding your current conditions. This self-assessment is designed to guide your community through a data gathering process that will help inform your team’s work sessions during the Growing Water Smart Workshop.

The capacity of your community and history of planning will influence the thoroughness of the data available. For the purpose of informing your team’s dialogue during the Growing Water Smart Workshop, please collect as much data as possible on your current conditions and share the summary with your team prior to the workshop. Responses to this self-assessment do not need to be comprehensive status reports. **Keep responses high level and brief enough to guide your discussions and provide weblink or document and page citations so that you can easily dive deeper, if necessary.**

There is not an expectation for you to gather data that you do not have available. In cases of where you do not have information, simply acknowledge what you do not know. Communities with more capacity or a longer history of planning are more likely to have invested resources in studies that provide them a more comprehensive understanding of water resource management. If you are gathering data from multiple sources for your workshop, such as multiple water providers or planning departments, please ask each agency/organization to complete a Self-Assessment. **Please clarify the name of the agency in the document’s header.**

The Growing Water Smart Self-Assessment is organized into four sections.

**Section 1** gathers data related to trends that influence your community’s water supply and demand, such as growth rates and drought. This information is likely to be found in current plans such as the general plan, climate adaptation plan, or emergency preparedness plan. If you have no local data, you can find data on trends at the

**Arizona Office of Economic Opportunity:**
Population Estimates: <https://population.az.gov/population-estimates>Population Projections: <https://population.az.gov/population-projections>

**Arizona Department of Water Resources:**
Drought Status: <https://new.azwater.gov/drought/drought-status>Drought Planning: <https://new.azwater.gov/drought/arizona-drought-planning>

**Drought.gov:**
National Integrated Drought Information System: <https://www.drought.gov/drought/states/arizona>

**Section 2** gathers information that is typically found in water planning documents or water budgets about your water supply and demand. Depending upon the capacity of your community, you may not have all this information available. Sources of data will likely be the water utilities or water resource managers.

**Section 3** gathers information on current water conservation and efficiency efforts included in water and land use policies and plans. Sources of data will likely be the planning department, water utilities or water resource managers.

[Summaries of Conservation Programs in Arizona](https://new.azwater.gov/conservation/water-planners-providers)

**Section 4** gathers information regarding your community’s current policies that are most likely to link water and land use beyond traditional water conservation and efficiency standards including connecting water demand to growth patterns, water quality, and watershed health. The planning department staff or planning commission are the likely sources for this information.

**Part 1: Understanding Trends that Influence Water Supply & Demand**

*Please enter your responses into the brown highlighted boxes.*

|  |  |
| --- | --- |
| AREA OF INFLUENCE | TRENDS |
| 1. What changes or trends has our community experienced that may influence our water supply?
 |
| A. Climate Trends | **Trends**  |
| * Temperature
 |  |
| * Precipitation (rain and/or snow)
 |  |
| * Drought
 |  |
| * Fire
 |  |
| * Flood
 |  |
| B. Is our economy growing, declining or shifting? |
| * Property tax base change from 2000 to current period
 |  |
| * Sales tax change from 2000 to current
 |  |
| * Largest economic sector changes
 |  |
| C. What changes in business sectors are we seeing? |
| * Agriculture uses growing/declining
 |  |
| * Commercial uses growing/declining
 |  |
| * Industrial uses growing/declining
 |  |
| D. What demographic shifts have we seen? |
| * Population growing or declining?
 |  |
| * What is our projected population growth rate?
 |  |
| E. How are we growing? |
| * Number of building permits annually past two decades?
 |  |
| * Where is most of the new development located?
 |  | Urban |  | Exurban |  | Rural |
| * What is the most frequent type of development application?
 |  | Minor Subdivisions |  | Major Subdivisions |  | Planned Developments |
|  | Multifamily |  | Infill |  | Other:  |

# **Part 2: Our Current Inventory: Water Supply & Demand**

|  |  |
| --- | --- |
| WATER SUPPLY AND DEMAND QUESTIONS | RESPONSE |
| 1. Does our community have a clear understanding of our Organization/County/Municipality’s water supply and demand balance?
 | We know our water supply, but not our water demand. | We know both our water supply and demand. |
|  |  |
| 1. Is our water supply and demand balanced? *Please mark most accurate with an X. Add any comments below.*
 |  | We have not calculated our current water supply and demand balance. |
|  | Our water budget is currently balanced, but a shortage is projected for the future if trends continue. |
|  | Our water budget is currently balanced and is projected to remain balanced over the next 25 years. |
| 1. What is our total current and projected supply and demand in AF?
 | **Current:** |
| **Projected (to year):**  |
| 1. Do we have a study or plan that summarizes our water supply and/or demand?
 | **Yes** | **No** |
|  |  |
| *Please provide link to the report or study.* |  |
| 1. What is the composition of our water supply?
 | ***Mark all that apply with an X.*** |
| * Surface water (AF)
 |  |
| * Tributary Groundwater (AF)
 |  |
| * Non-tributary Groundwater (AF)
 |  |
| * Individual household wells (number)
 |  |
| * Reuse (AF)
 |  |
| 1. What is the sector breakdown of our current water demand? (in AF)
 |  |
| * Agriculture
 |  |
| * Industrial
 |  |
| * Municipal/Residential SF
 |  |
| * Municipal/Residential MF
 |  |
| * Municipal/Commercial
 |  |
| 1. If you know our current gallons per capita water demand, please provide. *If you use another criteria to measure demand, include that instead.*
 |  |
| 1. Do we have a gallons per capita water demand or percentage target for conservation? *Please provide.*
 |  |
| 1. Are additional water supply storage projects being considered to meet future demand?
 | **Yes** | **No** |
|  |  |
| 1. Is climate vulnerability and variability part of the assessment of future water supply?
 | **Yes** | **No** |
|  |  |
| 1. Has an assessment of impacts of water conservation been conducted? (e.g. revenue, water infrastructure, etc.)
 | **Yes** | **No** |
|  |  |
| 1. Are proven methodologies for population and growth projections used to determine future water demand?
	1. If yes, which methods:
 | **Yes** | **No** |
|  |  |
| * A linear population growth model is used
 |  |
| * Low, medium, and high population projections are used
 |  |
| * Growth scenario modeling is used
 |  |
| * Demand projections are tied to land use; If yes, are demands are tied to specificity of zoning code (C-1, C-2, etc) or are demands are tied to specific development types within zones (restaurants, dry cleaners, etc)?
 |  |
| * Other
 |  |
| 1. Have projected land use changes been connected to water demand projections with a clear methodology for how future water demand is determined?
 |  |
| * Based on total number of households/taps based on growth projections
 |  |
| * Based on population projection
 |  |
| * Based on density or historical land use type per acre
 |  |
| * Other
 |  |
| 1. What is the source of the population data?
 |  |
| * State Demographer’s Office
 |  |
| * Consultant
 |  |
| * Other
 |  |
| 1. Have we included climate vulnerability and variability as part of the assessment of our future water supply? If yes, how did we assess vulnerability? What is our firm yield?
 |  |

# **Part 3: Our Watershed Health, Water Conservation and Efficiency Programs**

*Brown boxes indicate where to mark responses with an X or comment.*

|  |  |  |
| --- | --- | --- |
| WATER CONSERVATION QUESTIONS | RESPONSE | LINK TO POLICY |
| 1. What has our community done to promote watershed health?
 | **Yes** | **No** |  |
| * Adopted an Open Space Plan
 |  |  |  |
| * Adopted a Watershed Management Plan
 |  |  |  |
| * Integrated Water Resources Plan
 |  |  |  |
| * Other
 |  |  |  |
| 1. What has our community done to promote water conservation?
 | **Yes** | **No** |  |
| * Adopted a Water Supply Plan
 |  |  |  |
| * Adopted a [Water Conservation Plan](https://new.azwater.gov/conservation/water-planners-providers)
 |  |  |  |
| * Adopted a Drought Preparedness Plan
 |  |  |  |
| * Other
 |  |  |  |
| 1. Does our community’s water provider(s) conduct any of the following water conservation programs?
 | **Yes** | **No** |  |
| * Cash for grass/turf replacement
 |  |  |  |
| * Rebates for fixtures and appliances
 |  |  |  |
| * Water efficient product giveaways
 |  |  |  |
| * Conservation education for consumers
 |  |  |  |
| * Landscaping education for property owners
 |  |  |  |
| * Landscaping education for landscaping professionals
 |  |  |  |
| * Water efficiency rebates
 |  |  |  |
| * Water audits
 |  |  |  |
| * Water metering
 |  |  |  |
| * Rate structuring
 |  |  |  |
| * Effluent Reuse
 |  |  |  |
| * Other:
 |  |  |  |
| 1. If we have a utility that uses rate structuring to promote water conservation, which of the following does the utility use? *Please mark the structure you use with an X.*
 |
|  | Drought Demand Pricing: *Rates are higher during drought periods.* |
|  | Excess Use: *Rates are higher for above average water use.* |
|  | Inclining Block: *Rate per block increases as water use increases.* |
|  | Indoor/Outdoor: *With separate meters, rates for indoor use are lower rates for outdoor use.* |
|  | Penalties: *Customers are charged for exceeding allowable limits of water.* |
|  | Scarcity Pricing: *The costs of developing new supplies is added to bills.* |
|  | Seasonal Pricing: *Water rates are higher during the season with the most demand.* |
|  | Sliding Scale: *The unit price increases based on an average consumption.* |
|  | Spatial Pricing: *Water rates are determined by the actual costs to supply water to specific locations.* |
|  | Time-of-Use: *Water rates are higher during peak days or specific hours of the week.* |
|  | Water Budget: *Block rate are defined for each individual customer based on an efficient level for that customer.* |
|  | Other: |
| 1. Are there water use restrictions for drought periods?
* Mandated/Required
* Voluntary
 | **Yes** | **No** |
|  |  |
|  |  |

**Part 4: Assessing the Policy Enabling Environment: Land Use – Water Nexus***Brown boxes indicate where to mark responses with an X or comment.*

|  |  |  |
| --- | --- | --- |
| GENERAL/COMP. PLAN QUESTIONS | RESPONSE | LINK TO POLICY |
| 1. Does our comprehensive/general plan include recommended goals and/or strategies for the following?
 | **Yes** | **No** | *Please link to the plan* |
| * Sustainable water supply and/or demand management
 |  |  |  |
| * Water quality protection or water source protection
 |  |  |
| * Watershed processes and watershed health
 |  |  |
| * Water conservation and efficiency
 |  |  |
| * Designed growth areas connected to water infrastructure
 |  |  |
| * Promotion of compact development patters
 |  |  |
| * Climate change (mitigation and adaptation)
 |  |  |
| * Drought management
 |  |  |
| * Wastewater management
 |  |  |
| * Floodplain and stormwater management
 |  |  |
| * Groundwater management and protection
 |  |  |
| 1. Does our community have any supporting plans that include elements on water resource management?
 | **Yes** | **No** | *Please link to the plan* |
| * A climate action plan, adaptation plan or resiliency plan
 |  |  |  |
| * A sustainability plan
 |  |  |
| * An emergency preparedness plan
 |  |  |
| * A floodplain management plan
 |  |  |
| * Adopted an Integrated Water Resources Plan
 |  |  |
| * Other?
 |  |  |

|  |  |  |
| --- | --- | --- |
| DEVELOPMENT CODE QUESTIONSSustainable Water Supply | RESPONSE | LINK TO POLICY |
| 1. What are our water supply requirements for new development?
 | **Yes** | **No** | *Please link any references* |
| * Certificate of Assured Supply from ADWR or written commitment of service from a designated municipal provider
 |  |  |  |
| * An Adequacy Determination from ADWR or written commitment of service from a designated provider
 |  |  |  |
| * Other
 |  |  |  |
| * We have requirements beyond State law. *Please Explain*
 |  |  |  |
| 1. Do we allow development that has received a finding of inadequate water by the ADWR?
 |  |  |  |
| 1. Have we adopted a local adequate water supply requirement?
 |  |  |  |
| 1. Do we require all development to connect to a certified water provider?
 |  |  |  |
| * 1. If no, do we:
 |
| * require development within a designated number of feet of a provider to connect?
 |  |  |  |
| * allow transported water as a water source, and if yes, are there conditions that apply?
 |  |  |  |
| 1. Do we require all developments to submit an estimate of a development’s water demand at build out in our development application?
 | **Yes** | **No** |  |
|  |  |
| 1. Do we use an established methodology for calculating that demand?
 |  |  |  |
| 1. Do we permit development on individual wells?
 |  |  |  |
| * 1. If yes, do we…
 |
| * have regulations that restrict location or density of development on wells?
 |  |  |  |
| 1. At what point is the proof of water required in the development approval process?

*Please check one.*  |
| * Initial or preliminary plat submittal
 |  |  |
| * At final development approval
 |  |  |
| * By development phase(s)
 |  |  |
| 1. Who conducts the water adequacy review for development proposals?

*Check all that apply with an X.* |
| * Review by the State (for well permits)
 |  |  |
| * Planning Commission
 |  |  |
| * Water Resource Department or Engineer
 |  |  |
| * Utility Department
 |  |  |
| DEVELOPMENT CODE QUESTIONSSite Development Standards for Water Quality | **RESPONSEYes No** | **LINK TO POLICY** |
| 1. Does our Development Code include zoning or development standards for water quality protection?
 |  |  | *Please link the code section* |
| 1. If Yes, does it include any of the following?
 |
| * Development standards in sensitive areas through clustering or limited development densities.
 |  |  |  |
| * Development standards for stream buffers and setbacks to protect water quality.
 |  |  |  |
| * Vegetation protection standards that minimize disturbance to vegetation within the riparian corridor.
 |  |  |  |
| 1. Does our Development Code include zoning or development standards for water quality protection?
 | **Yes** | **No** | *Please link the code section* |
|  |  |
| * 1. If Yes, does it include any of the following?
 |
| * Zoning districts that require lower densities and/or cluster development to protect surface and groundwater sensitive areas.
 |  |  |  |
| * Designated surface and/or groundwater districts with standards to minimize contamination of streams and shallow aquifers that will protect existing and potential sources of drinking water supplies. (e.g. watershed overlay zone, groundwater protection zone)
 |  |  |  |
| 1. Does our Development Code include policy that promotes and/or supports compact form?
 | **Yes** | **No** |  |
|  |  |
| * 1. If Yes, does it include any of the following?
 |
| * + Higher density and smaller lot sizes by right
 |  |  |  |
| * + Mixed use by right
 |  |  |  |
| * + Housing types by right other than single family (e.g. MF, townhomes, ADUs, condos, etc.)
 |  |  |  |
| * + Rural conservation cluster subdivisions
 |  |  |  |
| * + Development incentives for water efficient development (e.g. density bonus, reduced fees)
 |  |  |  |
| * + Designated future growth and/or infill areas or boundaries with infrastructure available for higher density development.
 |  |  |  |
| 1. Does our Development Code have a provision requiring water conservation and efficiency in our:
 | **Yes** | **No** |  |
| * + Planned Development Policy
 |  |  |  |
| * Annexation Policy
 |  |  |  |
| 1. Does our Development Code include landscaping standards to reduce outdoor water use?
 | **Yes** | **No** |  |
| * 1. If Yes, does it include any of the following?
 |
| * Turf Species limitation (Type of turf)
 |  |  |  |
| * Turf Area limitation (square footage limitations)
 |  |  |  |
| * Total Landscaped Area limitations
 |  |  |  |
| * + Plant selection (e.g. Native/Xeric plant lists)
 |  |  |  |
| * + Irrigation efficiency practices (e.g. drip, bubblers, low flow sprinklers, rain and/or ET sensors)
 |  |  |  |
| * + Water schedules for outdoor irrigation to reduce demand and/or evapotranspiration (e.g. time of day, day of week, seasonal)
 |  |  |  |
| * + Water budgets for outdoor water use (limitations on allowable water consumption in a landscape area)
 |  |  |  |
| * + Soil enhancements and organic mulching requirements
 |  |  |  |
| * + Rainwater harvesting standards
 |  |  |  |
| * Water waste limitations
 |  |  |  |
| * Site inspections
 |  |  |  |
| * Code enforcement and fines for violations of standards
 |  |  |  |
| 1. Does our Development Code include regulatory, not voluntary, emergency water use restrictions for drought periods?
 | **Yes** | **No** |  |
|  |  |
| BUILDING & PLUMBING CODE QUESTIONSEfficient Indoor Water Use | **RESPONSE** | **LINK TO POLICY** |
| 1. What is our current plumbing code?
 |  |
| 1. What is our current building code?
 |  |
| 1. Does our code have Plumbing Efficiency Standards that promote water conservation for *Residential* uses?
 | **Yes** | **No** | *Please link the code section* |
|  |  |
| * 1. If Yes, does it include any of the following?
 |
| * Water efficient plumbing fixture requirement (e.g. Water Sense, Energy Star, etc.)
 |  |  |  |
| * Water efficient appliance requirement (e.g. Water Sense, Energy Star, etc.)
 |  |  |  |
| * Gray water plumbing systems (e.g. Tap to Toilet, Laundry to Landscape, etc.)
 |  |  |  |
| 1. Does our code have Plumbing Efficiency Standards that promote water conservation for *Commercial, Industrial, Institutional* uses?
 | **Yes** | **No** |  |
|  |  |
| * 1. If Yes, does it include any of the following?
 |
| * Water efficient plumbing fixture requirement (e.g. Water Sense, Energy Star, etc.)
 |  |  |  |
| * Water efficient appliance requirement (e.g. Water Sense, Energy Star, etc.)
 |  |  |  |
| * Additional commercial standards for high water consumption uses (e.g. car washes, golf courses, hotels, restaurants, laundromats, etc.) including:
 |  |  |  |
| * + Pre-rinse spray valves
 |  |  |  |
| * + Water Recycling Systems
 |  |  |  |
| * + Graywater Systems
 |  |  |  |
| * + Decorative Water Features
 |  |  |  |
| * + Water Saving Signage
 |  |  |  |
| 1. Does our code include any of the following plumbing and building water saving standards?
 | **Yes** | **No** |  |
|  |  |
| * 1. If Yes, does it include any of the following:
 | **Yes** | **No** |  |
| * Metering for commercial and single-family units for new development connections
 |  |  |  |
| * Submetering for multifamily units for new development connections
 |  |  |  |
| * Fee incentive for new development to incorporate additional water efficient fixtures, appliances, plumbing above the required standard.
 |  |  |  |
| * Requirement for plumbing fixture retrofit on resale or for rehabilitation of property to receive C.O. or as a fee incentive for new development.
 |  |  |  |
| * Tap availability limitations
 |  |  |  |
| * Tap fee incentives for water conservation measures
 |  |  |  |
| 1. Are you doing anything else to conserve water that is not already mentioned in this assessment?
 | **Yes** | **No** |  |
|  |  |
| * 1. If Yes, please describe:
 |  |