

## 9. PLAN DESCRIPTION AND POLICIES

### 9.1 DEFINITIONS

Policies in PAG's 208 Plan refer to a number of key terms. These are defined below.

Wastewater Treatment Facility: A facility requiring an individual Aquifer Protection Permit or NPDES permit for the treatment and disposal of wastes from toilets, baths, sinks, lavatories, laundries, and other plumbing fixtures, in places of human habitation, employment, or recreation. On-site wastewater treatment systems (e.g., septic tanks) are not included in this definition.

Private Wastewater Treatment Facility: A wastewater treatment facility owned by an entity that is not a Designated Management Agency.

Public Wastewater Treatment Facility: A wastewater treatment facility owned by a Designated Management Agency.

Wastewater Reclamation Facility (or "Water" Reclamation Facility): A wastewater treatment facility that is constructed for the purpose of generating reclaimed wastewater for reuse.

Small Wastewater Treatment Facility: A wastewater treatment facility with a planned capacity less than 5 MGD. Small wastewater treatment facilities typically serve an individual subdivision, mobile home development, commercial facility, park, prison, school or other specific area that is not contiguous with the regional wastewater treatment and conveyance network.

Large Wastewater Treatment Facility: A wastewater treatment facility with an existing or planned capacity greater than or equal to 5 MGD. Large wastewater treatment facilities include regional facilities and sub-regional facilities.

Regional Wastewater Treatment Facility: A public wastewater treatment facility or public wastewater reclamation facility with an existing or planned service area that encompasses: (1) multiple jurisdictions; or (2) the majority of the incorporated area of a single city or town; or (3) the majority of an urbanized unincorporated area.

Sub-Regional Facility: A public wastewater treatment facility or public wastewater reclamation facility serving an area that could otherwise be served by a regional facility but is not because: (1) service by a regional facility, while technically feasible, is impractical or uneconomical due to the conveyance distance and/or gradient constraints; and (2) the entity entitled to reuse the effluent wishes to facilitate the treatment and delivery of reclaimed water to the regional reclaimed water system at a location that lessens the conveyance costs of the reclaimed water.

### 9.2. REGIONALIZATION

It is PAG 208 Planning policy to treat sewage in regional and sub-regional, publicly owned wastewater treatment facilities, and to avoid a proliferation of small, privately owned facilities. This policy will be implemented by requiring 208 Plan Amendments before small, privately owned wastewater treatment facilities can be constructed or receive discharge permits.

The reason for the regionalization policy, as explained in the 1985 Areawide Point Source Update (Greeley and Hansen, 1985), is that various negative impacts may result if a number of small private wastewater treatment plants are constructed. The following considerations were noted in the 1985 Point Source Update with regard to small, private plants:

- difficulty in sewerage adjacent privately-owned properties
- reliability of small wastewater treatment plants
- problems that industrial wastes and sludge disposal create for small plants
- potential degradation of groundwater
- invalidation of regional plans.

In addition, as noted in the first chapter of this report, a proliferation of small facilities could place a strain on resources for inspection and enforcement, and it could result in water quality management in the region becoming the responsibility of numerous entities having varying levels of experience with local conditions. Also, if a waterbody were to become impaired, the presence of numerous discharges to that waterbody would complicate efforts to improve water quality and prepare a TMDL. Increased competition among local entities for federal loans and grants could also occur with an increase in the number of wastewater treatment facilities in the region.

### 9.3. PRIVATE WASTEWATER TREATMENT FACILITIES

The PAG 208 Plan discourages private wastewater treatment facilities. All private facilities are considered to be inconsistent with the 208 Plan unless specified otherwise in the 208 Plan or in an approved 208 Plan Amendment.

In rare cases, a very small, isolated private wastewater treatment facility could be deemed “not inconsistent” with PAG’s 208 Plan under the following conditions:

- no sewer service from the Designated Management Agency will likely be available within 10 years, and the Designated Management Agency declines (in writing) to provide service to the area that the private facility would serve;
- there are adequate assurances that the facility will connect to the public conveyance and treatment system at such time that service by a Designated Management Agency becomes available (the DMA will determine what is required to demonstrate “adequate assurance”);
- the facility owner and operator demonstrate, to the satisfaction of ADEQ, PDEQ, the DMA, the water provider and the local jurisdiction where the facility would be located, the financial and technical capability to operate the facility for the entire time that the facility will be needed;
- there will be no discharge to any waters of the United States;
- the facility will not exceed 0.02 MGD capacity;
- the facility will not receive any commercial or industrial waste;
- neither the facility nor the conveyance lines to the facility will interfere with future plans for regional sewer service to the area or to adjacent or upstream areas;
- the facility will not interfere with water providers’ plans for providing water or reclaimed water to the site or to surrounding areas;

- the jurisdiction in which the facility will be located supports the construction of the facility, and none of the other PAG member jurisdictions objects to the facility's construction;
- the water provider whose service area includes the proposed facility location does not object to construction of the facility;
- it is demonstrated that the facility will not cause any water quality or odor impacts to surrounding areas; and
- all property owners within ½ mile of the proposed facility location are notified of the proposal, and none of the property owners within ½ mile object to the proposal within 30 days of being notified.

#### 9.4. POLICY ON FACILITIES CONSTRUCTED DESPITE LACK OF CONFORMANCE WITH 208 PLAN

PAG's policy on facilities constructed despite lack of conformance with the 208 Plan is that they should be connected to the regional wastewater treatment system and that the areas served by these facilities should be served by the Designated Management Agency with a facility that conforms with the Plan. Any expansion of the non-conforming facilities would be inconsistent with the 208 Plan. Issuance of new permits, modified permits, or permit renewals for non-conforming facilities would be inconsistent with the 208 Plan.

#### 9.5. AZPDES PERMITS FOR INDUSTRIAL FACILITIES

Surface water discharges of industrial wastewater requiring AZPDES permits are inconsistent with the PAG 208 Plan unless otherwise specified in the 208 Plan or in an approved 208 Plan Amendment. Industrial stormwater discharges that are in compliance with EPA's MSGP or that are addressed by the AZPDES municipal stormwater permits are consistent with the PAG 208 Plan.

#### 9.6. AZPDES PERMITS FOR OTHER ACTIVITIES

##### 9.6.1. Municipal stormwater discharges

PAG's 208 Plan recognizes the importance of maintaining stormwater quality and reducing non-point source pollution as part of a comprehensive water quality management plan. PAG works with local municipalities to develop and coordinate regional public outreach and education programs on stormwater pollution prevention, and to help local governments coordinate on various stormwater permitting issues as they arise. Issuance of AZPDES permits to municipalities for stormwater discharges will generally be consistent with the 208 Plan.

##### 9.6.2. Groundwater remediation projects

PAG's 208 Plan encourages the remediation and beneficial use of contaminated groundwater. In the event that a groundwater remediation project requires an AZPDES discharge of the treated water, issuance of the permit would, under most circumstances, be consistent with the 208 Plan provided that no local jurisdiction potentially affected by the discharge objects.

##### 9.6.3. Reclaimed water projects

Expansion of the regional reclaimed water system is encouraged by the PAG 208 Plan. Additional treatment of this water, expansion of facilities, and increased use of reclaimed water,

such as the plans proposed in the City of Tucson's draft *Water Plan 2000-2050* (including recharge of groundwater supplies), are all supported by the 208 Plan.

#### 9.6.4. Riparian restoration projects

PAG's 208 Planning policy on riparian restoration projects is that projects requiring an AZPDES permit for the use of reclaimed water to restore or enhance riparian vegetation along ephemeral or effluent-dependent washes will generally be consistent with the 208 Plan, provided that the project does not conflict with other local or regional plans or intergovernmental agreements.

#### 9.6.5. DeMinimis discharges

Discharges authorized by the AZPDES DeMinimis Discharge General Permit are typically not inconsistent with the PAG 208 Plan.

### 9.7. ON-SITE SYSTEMS

On-site domestic wastewater treatment systems (e.g., septic tanks) are one of several accepted ways of managing water quality in Pima County. However, installation and use of on-site systems where connection to a Designated Management Agency's wastewater conveyance system is technically and economically feasible would be inconsistent with the 208 Plan. Existing subdivisions relying on septic tanks for wastewater treatment are encouraged to connect to the Designated Management Agency's conveyance and treatment system when it becomes accessible.

### 9.8. CONVERSION OF SEPTIC SYSTEMS TO ON-SITE WASTEWATER TREATMENT FACILITIES

Some public facilities such as schools and parks use septic tanks to treat wastewater because sewer service is not available. Proposals to change the wastewater service for these facilities from a septic tank to an on-site wastewater treatment facility will normally require a 208 Plan Amendment. However, such a conversion could be deemed consistent with the 208 Plan provided that it represents a net environmental benefit, the local jurisdiction does not object, and the facility does not serve any off-site areas. In addition, the facility would be expected to connect to the Designated Management Agency's conveyance and treatment system as soon as service becomes available.

### 9.9. PRIORITY WATERBODIES

Table 9-1 is a list of the highest priority streams in Pima County for water quality and quantity monitoring, management and restoration. The streams were selected by PAG and Pima County staff as part of the water quality element of the Pima County Comprehensive Plan and the Pima County Sonoran Desert Conservation Plan. Stream selection was based primarily on the presence of perennial or intermittent stream flow, the area of riparian habitat, the presence of historic or existing populations of native fish and frog species, and location with respect to other surface water sources and possible wildlife corridors. The potential threat to any individual stream or the fact that an individual stream might already be monitored or protected was not considered when developing the list. Some streams did not have as high habitat value as others but were included because they were considered to be a priority by the Bureau of Land Management, U.S. FWS, PAG, Arizona Game and Fish Department (AGFD), or County personnel. Pima County's Sonoran Desert Conservation Plan Riparian Element report, especially Appendix A1 – Table 1, and the historic occurrence of native fish were used to

determine the resources present in and around each stream. Priority stream locations are shown on Figure 9-1. Unique waters, as identified and regulated under the state, have stricter water quality standards, which must be met to be consistent with the 208 plan

In recognition of the resource value of the waterbodies listed in Table 9-1, PAG's 208 Plan strongly discourages the discharge of pollutants to these waterbodies. Issuance of AZPDES permits for commercial, industrial or domestic wastewater facility discharges to the priority waterbodies would be inconsistent with the 208 Plan. Future 208 Plan Amendments that would allow such discharges are discouraged but not prohibited if consistent with state surface water quality standards. However, efforts to restore floodplain aquifers or reestablish flow or degraded riparian vegetation would require special consideration to determine if there are net biological benefits.

Table 9-1. Priority Waterbodies in Pima County

Agua Caliente Canyon	Espiritu Canyon
Agua Verde Creek	Florida Canyon
Arivaca Creek	Mattie Canyon
Bingham Cienega	Quitobaquito Spring
Buehman Canyon	Rincon Creek
Canada del Oro (upper)	Sabino Canyon (upper and lower)
Cienega Creek (upper and lower)	San Pedro River
Davidson Canyon	Tanque Verde Creek (upper)
Empire Gulch	Wakefield Canyon/Nogales Spring

#### 9.10. REUSE OF WASTEWATER

The importance of treated wastewater as a water resource in the region has been acknowledged by PAG's 208 Plan for 25 years or more. As noted in Chapter 2, a policy stating that "wastewater reuse should be used as a disposal alternative wherever possible" was adopted in 1980, and the following policies were adopted in 1985:

- The practice of effluent reuse is strongly endorsed by the PAG Regional Council and its member jurisdictions
- Planning for wastewater treatment and effluent reuse treatment facilities will be done jointly by Pima County, the City of Tucson and local jurisdictions and will require Regional Council approval
- Private developments desiring effluent for use within a proposed project are encouraged to utilize effluent supplied by the City of Tucson via the Metropolitan Effluent Delivery System.

PAG will continue to rely on these policies when conducting wastewater treatment facility planning and when reviewing proposed 208 Plan Amendments for new or expanded wastewater treatment facilities. It is noted, however, with regard to the third policy listed above, that the City of Tucson will no longer be the only municipality with an effluent delivery system, and that utilization of effluent from other municipalities' effluent delivery systems is also encouraged. PAG will also continue to help the local jurisdictions and water providers holding rights to treated wastewater work together on plans for wastewater reclamation facilities.

Figure 9-1. Priority Streams in Pima County

