



ENVIRONMENTAL INTEGRITY FOCUS AREA
Energy & Climate Change, Green Infrastructure, Water
and Environmental Quality Working Groups
August 19, 2011

Break-Out Group Draft Policy Concepts/Statements

Explanation: *The Energy & Climate Change, Green Infrastructure, Water and Environmental Integrity Working Groups concluded with a participatory exercise. Participants in each of four break-out groups, facilitated by Plan Tucson staff, spent time individually writing down on an exercise worksheet initial concepts/statements for consideration in policy development for Plan Tucson. Participants then shared their ideas with the group as a whole while group facilitators captured highlights on flip charts. Transcriptions of the flip charts are presented below. Transcriptions of the individual worksheets are presented in a separate document. The exercise instructions and exercise sheets are also available as separate document.*

Group: Energy and Climate Change
Facilitator/Scribe: Gina Chorover

GOALS

- GOAL 1: Reduce Tucson's carbon emissions
- GOAL 2: Improve the adaptive capacity and resiliency of the community to a changing climate and more extreme weather events
- GOAL 3: Allow for a future planning scenario to be developed under which the region loses population....
- GOAL 4: Increase energy efficiency regardless of the energy source being used
- GOAL 5: Support train service to and from Phoenix
- GOAL 6: Develop an understanding and awareness of the energy network and interconnectedness of utilities
- GOAL 7: Reduce vulnerability of sensitive populations to climate change
- GOAL 8: Become a leader internationally in solar energy development
- GOAL 9: Increase awareness and behavior in the area of energy conservation by working with K-12 and higher education institutions
- GOAL10: Increase alternative transportation opportunities
- GOAL11: Integrate all energy and climate change policies with all other policies to improve quality of life
- GOAL 12: Reduce air pollution in the region
- GOAL 13: Fully support the efforts of TEP / UA / other major employers to increase local renewable energy generation
- GOAL 14: Decrease the urban heat island by preserving, increasing and improving local natural environment

GOAL 15: Promote urban infill rather than sprawl

GOAL 16: Provide resources and maximum opportunities for implementation of policies

POLICIES

GOAL 1: Reduce Tucson's carbon emissions

Policies:

- Continue and increase funding to the Office of Conservation and Sustainable Dev.
- Increase number of alternative fuel stations
- Provide rush hour lanes for alternative fuel cards
- Increase reliance (funding, use) on public transport
- Prohibit leaf blowers
- Free parking (City controlled parking) for electric vehicles
- Improve energy efficiency of existing building
- Increase energy efficiency standards for new construction
- Require all new city vehicles to be energy efficient
- Promote employment policies by major employers that reduce carbon emissions and vehicle miles traveled
- Monitor and control use of wood burning stoves and fireplaces
- Require new construction buildings with more than 50,000 sf to use solar power
- Provide information and resources for large business and employers on energy efficiency
- Encourage residents to use energy efficient driving practices and good vehicle maintenance
- Encourage biking to work and free bike zones
- Educate residents and commuters about alternative transportation
- Fund clean air program
- Require all new homes to be net zero energy
- Encourage use of green concrete
- Expand effort to increase a cross section of residents in energy programs, esp solar.
- Phase in the social cost of carbon
- Plan for additional streetcar lines and find funding
- Support green building and alternative energy industry
- Find money to market these ideas

GOAL 8: Become a leader internationally in solar energy development

Policies:

- City of Tucson should convert all streetlights to solar technology
- Work with TEP to create broader maps for disturbed locations to be used as solar check sites
- Establish low cost purchase options for residential solar using city bonds
- Establish a permanent fund for solar installation on city buildings
- Increase our SEPA rating
- Improve and streamline solar permit process
- Require solar hot water on new homes and homes when sold

Group: Green Infrastructure
Facilitator/Scribe: María Gayosso

GOALS

- GOAL 1: Use available land within the city to help create an interconnected system of green/open spaces that will include parks, pathways, gardens, wildlife habitats, etc.
- GOAL 2: Ensure that regulations related to the natural environment and landscaping produce the results we would like to accomplish.
- GOAL 3: 50% canopy tree throughout the city.
- GOAL 4: Create within each district in the city (i.e. south, central, neighborhoods) an interconnected system of urban trails and urban parks.
- GOAL 5: Identify and preserve biological and riparian habitats, wildlife linkages, and open space.
- GOAL 6: 100% water harvesting.
- GOAL 7: Integrate transportation planning with habitat protection.

POLICIES

GOAL 1: Use available land within the city to help create an interconnected system of green/open spaces that will include parks, pathways, gardens, wildlife habitats, etc.

Policies:

- Land Use Code needs to include mechanisms for infill development to explore/ include the integration of green infrastructure practices and designs.
- Revisit adopted land use plans so they identify areas for development and areas for preservation and green infrastructure. A consistent approach will be needed

GOAL 2: Ensure that regulations related to the natural environment and landscaping produce the results we would like to accomplish.

Policies:

- Revisit landscaping and other regulations to evaluate progress made or new alternatives to achieve our goals. For instance: To achieve a greater number of pedestrians in a shaded area: do we need 10% canopy tree coverage, and/or do we increase the width of the pedestrian area.
- Studies need to be done to determine the most effective percentage of canopy tree coverage and location that integrates all aspects of environmental integrity.

GOAL 4: Create within each district in the city (i.e. south, central, neighborhoods) an interconnected system of urban trails and urban parks.

Policies:

- Expand the trail system within the city and connect it to the outer regional trail system to support the various areas in the city (neighborhoods, south side, west side, central, etc.).

GOAL 5: Identify and preserve biological and riparian habitats, wildlife linkages, and open space.

Policies:

- For annexation projects, all jurisdictions to implement the County's Sonoran Desert Conservation Plan.
- Complete and adopt the Avra Valley and Southlands Habitat Conservation Plans
- Adopt and implement a riparian habitat and mitigation plan

GOAL 6: 100% water harvesting

Policies:

- Encourage the maximum water harvesting, using different techniques, throughout the entire basin system.

GOAL 7: Integrate transportation planning with habitat protection

Policies:

- Encourage the maximum water harvesting, using different techniques, throughout the entire basin system.
- City to adopt environmentally sensitive roadway design guidelines (Pima County already has this tool in place)

ADDITIONAL POLICIES:

- Develop a Green Infrastructure Plan that provides a framework to house currently fragmented policies, and provides the flexibility to go through iterative processes.
- Flexible code amendments needed to allow for green infrastructure projects, in a coordinated fashion between all involved parties.

Group: Water

Facilitator/Scribe: Rebecca Ruopp

GOALS AND POLICIES

NOTE: First thing that group talked about was the need to analyze the Water/Wastewater Study for policies appropriate for integration in Plan Tucson.

GOAL 1: Determine priorities for water use and consumption (functional)

Policies:

- Adjust water charges and subsidies to conform to use and consumption
- Adjust priorities / funding to affordable level – Maintain affordability

GOAL 2: More groundwater recharge

Policies:

- Look at policy that creates micro watersheds

GOAL 3: Promote rainwater harvesting

GOAL 4: Increase use of non-potable water resources for irrigation, industrial, recharge, and environmental purposes

GOAL 5: Maximize use of renewable resources or reduce dependency on nonrenewable resources

Policies:

- Consider all water resources in land use and infrastructure planning. Right now renewable resources are considered to be CAP & effluent – don't consider storm water, passive collection, etc.; need a paradigm shift
- prioritize area that we mine groundwater

GOAL 6: Efficient management of water supply

Policies:

- Dedicate source for landscape –
- Water efficiency should be linked to other issues (flooding, etc.)

GOAL 7: Understand community values

GOAL 8: Provide public education to understand water in Tucson context (for instance, point was made that drought may not be understood as it is in other places because we live with drought on a regular basis)

GOAL 9: Look at Land Use Code – for instance parking lot standards – could recharge off of parking lots for instance

GOAL 10: Look at from hydrological (sound) basis

GOAL 11: Look at region – upland areas, watersheds

(Note – reference to study done by Nature Conservancy on open space)

GOAL 12: Consider aquifer health (volume) when making land use decisions – including service areas

GOAL 13: Regional collaboration (group noted that this links to item above)

GOAL 14: Permanent protection of groundwater quality (would need to define “quality”)

GOAL 15: Need sufficient funding

Policies:

- Consider the relationship of funding for water related programs and infrastructure and economic development (Point was made that this needs to be thought about carefully given that more wealth through economic development could also mean more water need / use.)
- Work to realize new funding mechanisms, both private and public, to pay for new water-related infrastructure.

GOAL 16: Create conservation policies that are appealing to renters.

Point was made that while renters may be interested in conservation, they aren't likely to put money into hardware/equipment for their residence since they don't own. However, they may well support community conservation efforts through volunteerism.

GOAL 17: Consider lifecycle costs and long-term sustainability.

GOAL 18: Come up with policy that facilitates removal of swimming polls

GOAL 19: More residential grey water systems/use

Group: Environmental Quality

Facilitator/Scribe: Ann Vargas

General Environmental Quality Goals and Policies

GOAL 1: Enhance overall community participation in addressing environmental quality.

Policies:

- Provide opportunities for broad community participation through education, programming, and accessible practices.
- Commit to specific training, education, and enforcement standards.

GOAL 2: Clarify the City's roles and responsibilities in the context of the environmental quality network.

Policies:

- Clarify the relationships between the offices and agencies providing environmental quality services including legislated mandates; enforcement authority; funding; testing; programming; partnering, and mutually beneficial or damaging practices.

GOAL 3: Reinforce behavior modification related to environmental quality. Consider how each policy can change consumer/citizen behaviors and integrate these practices into policy action items.

GOAL 4: Change public expectations regarding environmental quality issues and approaches.

Policies:

- Augment mass transit.
- Define what "mobility" means in terms of current vehicle type/size, fuels, and road development and maintenance costs.
- Apply the principles of co-location to achieve environmental quality. E.g. Civano

GOAL 5: Balance equity and fairness for all citizens in the context of environmental quality policies, programs, and practices.

GOAL 6: Redefine the approach to environmental quality from mitigation (clean up) to a focus on innovation. Policies and programs should enhance economic development, sustain and improve the environment, and create renewable resources.

Policies:

- Develop and advertise economic incentives as a means to achieve environmental quality. E.g. Vancouver, B.C. carbon tax
- Illustrate the integration and reciprocal impacts of environmental elements regarding quality of life in the community.
- Promote environmental quality as a necessity, not an amenity.

GOAL 7: Raise the aquifer.

Air Quality Goals and Policies

GOAL 8: Elevate the role of Air Quality in environmental quality and community health; list it in the General Plan as a separate element.

Policies:

- Evaluate and describe the impacts of poor air quality as a planning tool and define the relative importance of air quality to General Plan elements like Water and Climate Change.
- Evaluate Tucson's air quality in an appropriate regional context (within Arizona, the southwestern United States, and Mexico).
- Assess the risks and impacts of regional pollution, disparate standards and practices, forest fires, mining operations, dust, water, and drought as it pertains to maintaining air quality in Tucson and Pima County.

GOAL 9: Maintain and improve upon current air quality standards.

Policies:

- Apply Pima County's recent air quality ratings as a minimum threshold/benchmark and enhance the community's ability to further improve air quality under Clean Air Act attainment standards.
- Promote full funding levels for successful programs and best management practices (collaborative partnerships). E.g. Vehicle retrofits authorized under Arizona Revised Statutes.
- Encourage broad-based education and participation in air quality management practices, with a specific solicitation to private sector businesses e.g. Chamber of Commerce membership.
- Apply a multi-disciplinary approach to managing air quality that includes urban foresting, infill development, alternative fuels for fleet operations.
- Set a standard to achieve a balance between impervious surfaces and urban foresting. (Do not under estimate the impact of tree canopy as a clean-air strategy).
- Target specific (declining) areas for urban foresting, e.g. dry, neglected, medians.
- Promote alternative fuels.

Waste Goals and Policies

GOAL 10: Shift paradigm to a new business model for waste production, collection, and recycling. E.g. Long-term goal is to design and implement a “zero waste” production model. (Waste disposal should not be a one-way system or something we “do”.)

Policies:

- Create private sector partnerships that model the adaptive re-use of waste. (Create new products/markets/jobs)
- Design a waste disposal/recycling system that is easily accessible to everyone--- citizens, large, and small businesses.

GOAL 11: Develop an integrated waste reduction plan.

Policies:

- Funding
- Education
- Dedicated Space
- Development Mandates
- Recycling

GOAL 12: Enhance City and County collaboration on waste disposal.

Policies:

- Develop a countywide standard that is based on inter-jurisdictional coordination to achieve consistency and accountability for all entities/businesses involved in waste disposal, including private haulers.
- Cross-train Directors and Department Heads in environmental quality issues, policies, and practices.
- Create incentives and accountability that requires the generator of the waste to also be the party responsible for providing the disposal/recycling opportunity. E.g. construction waste model

GOAL 13: Address waste disposal practices in a holistic fashion.

Policies:

- Re-evaluate and re-design the countywide hauling system. (Cost-benefit analysis of decentralization, environmental impacts of maintaining the dispersed system, jurisdictional dumping sites, and cost/maintenance/design of equipment)

Brown fields Goals and Policies

GOAL 14: Reduce neighborhood blight caused by contaminated and under-utilized properties.

Policies:

- Create a comprehensive system to inventory contaminated or restricted properties that includes brown fields (approx. 5,000), Davis-Monthan properties, and the 23 landfills in Pima County.

GOAL 15: Determine the highest and best use for brown fields redevelopment.

Policies:

- Calculate the scope and cost of contamination relative to development potential for identified brown fields.
- Establish an appropriate mechanism to advertise and assess redevelopment opportunities with potential developers/investors.

GOAL 16: Make brownfields redevelopment a community-driven process.

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