Reducing Greenhouse Gases with Development of an Innovative Climate Projects Coordination Structure

Sky Dawn Reed, Environmental Quality Project Associate
Gila River Indian Community
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GILA RIVER INDIAN COMMUNITY
BACKGROUND

- Homeland to the Akimel O’odham (Pima) and Pee Posh (Maricopa)
- 21,000 population with 17,000 residents on the reservation
- 7 districts with about 3,000 households
- Located in both Maricopa and Pinal counties
- 374,000 land acres (640 m²)
- 10th largest nation in the United States
DEQ PROGRAMS

REGULATORY
- Air Quality*
- Pesticides
- Water Quality*
- Waste Programs* (Hazardous Waste / Solid Waste / Recycling)

EDUCATION & ENVIRONMENTAL OUTREACH
- Annual Events
  - Earth Day
  - Household Hazardous Waste collection
  - Winter Bird Count
- Routine Outreach
  - Schools
  - Special events

* Program includes climate elements
GRIC RECYCLING TIMELINE

1995: Cardboard Recycling

2007: Paper Recycling

2008: GRIC Toxics Reduction Initiative
       [EPA Community Action for a Renewed Environment]

2010: Residential Recycling and Climate Project
       [EPA Climate Showcase Communities]
Establish Residential Recycling Program
(key priority to reduce GHG emissions)

Conduct Solar Energy Feasibility

Provide Green Building Program support
(LEED Education)

Exchange Incandescent/CFL bulbs for Household Energy Use Reductions

Conduct Baseline Greenhouse Gas Emission Inventory
GRIC RECYCLING GOALS

- Reduce costs paid to off-community landfill
- Reduce the waste stream
- Reduce emissions of greenhouse gases
- Mitigate effects of climate change
PILOT PROGRAM OBJECTIVES

Partner with GRIC Public Works

- **Assess need** for recycling service
  (Waste characterization study – April 2010)
- **Create program plan**
- **Establish schedule** (weekly/monthly/bimonthly)
- **Deliver blue recycling containers**
- **Report results**
- **Expand** Community-wide

Deliver Recycling Program Message

- Community Saves $
- Participate!
- Save natural resources (reduce greenhouse gas emissions)
COORDINATION & PARTNERSHIPS

- Recycling Center
  [Materials Recovery Facility]
- Department of Public Works
- Department of Community Housing
- Facilities & Maintenance
- Department of Community Services

COMMUNITY OUTREACH

- GRIN Articles
- Billing statement inserts (Public Works)
- Door-to-Door visits
- Presentations
  - Community Districts
  - Elderly Community support
  - Youth Council
  - Boys & Girls Clubs
  - Schools
Pilot Program

- Single district: 676 residential units (May 2011)

Expansion

- 165 residential units (February 2012)

Curbside Collection (Department of Public Works)

- Bimonthly residential **recycling collection** – twice per month in two participating districts
- Biweekly residential **trash collection** - twice per week in every district
Impacts of GRIC Recycling

- Increased Community Action
- Foundation for Sustainable Future
- Enhanced awareness
As of October 2012 (18th Month of the program)

- Residents recycled 117 tons of glass, metal, paper and plastic (~6 tons per month)
- Achieved 40% participation (in pilot districts)
- 327 metric tons of CO₂ equivalent *
  - Greenhouse gas emissions released from 66 passenger vehicles.
  - CO₂ emissions from energy use in 16 homes within one year.

* EPA Waste Reduction Model
  http://www.epa.gov/climatechange/waste/calculators/Warm_Form.html
FUTURE PLANS FOR GRIC RECYCLING PROGRAM

Update Schedule
- Weekly collection w/substitution of trash pickup (for current pilot residents in January 2013)

Expansion of Curbside Service
- One additional district (Summer 2013)

Collect Other Material
- Printer cartridges
- Clothing
- Electronics
LESSONS LEARNED

- Be creative
- Benefits of door-to-door outreach
- Start small then go BIG (start in smaller district for pilot)
- Collaborate with key partners to set joint goals and expectations
- Celebrate milestones achieved
OTHER FUNDING RESOURCES

US Department of Commerce - Economic Development Administration
- Public Works and Economic Adjustment Facilities Grant (2011 – 2012)

State / Local / National Recycling Coalitions
(Education / Material resources)
- State Recycling Coalitions ex. Arizona Recycling Coalition
- Keep America Beautiful ex. Coca-Cola Bin Grant (2011)

United States Department of Agriculture
- Solid Waste Management Grant Program (2010/2011)

Home Depot Gift Cards (seasonal)

Private Funding ex: Kresge Foundation; Rockefeller Foundation

Tribal budget allocations
RECYCLING PROGRAM
CONTACT INFORMATION

Gila River Indian Community
Department of Environmental Quality
P.O. Box 97 / 35 Pima Street
Sacaton AZ, 85147
520 – 562 – 2234

Rudy Mix ext. 2249
Acting Executive Director
(Waste Program Manager)
Rudy.Mix@gric.nsn.us

Janet Travis ext. 2252
Environmental Quality Project Associate
(Full time Recycling Coordinator)
Janet.Travis@gric.nsn.us

Sky Dawn Reed ext. 2286
Environmental Quality Project Associate
(Waste Program)
Sky.Reed@gric.nsn.us