

# **WRITE Application, 2009**

## ***Partners in Recycling Education***

### **1) Goal of the Project**

The goal of Partners in Recycling Education is to boost recycling awareness, education and participation in northern Arizona based on common educational goals and populations served. The Partners are Northern Arizona University (NAU), the City of Flagstaff (COF), Coconino County Public Works (CC) and Willow Bend Environmental Education Center (WBEEC). Common populations are students in the Flagstaff Unified Schools, college students living on-campus and those living off-campus in multi family housing, single family residents served by household collection within City limits and County residents using the Cinder Lakes Landfill or County transfer stations. By uniting recycling messages with a common theme, "Recycle – we're all in this together!", all programs increase recycling rates and decrease contamination

### **2) Education Impact and Community Need**

The Partner's collection programs are the primary sources of recyclable material in the region and are uniquely positioned to provide an educational model for northern Arizona. Effective recycling education that incorporates strong assessment and coordination among Partners enhances each program individually and the collective regional effort. Our Partnership boosts recycling education through a range of advertising, promotion and community awareness events. This initiative is directed at campus communities, single and multifamily residents, Flagstaff Unified School students, K – 12, and users of the regional transfer stations.

NAU's Flagstaff campus student populations fluctuate in distinct patterns throughout the year and the entire student body needs education at orientation, during campus resident move-in and periodically throughout the year. Staff and faculty turnover rates average 16% per year, indicating the need for regular education at new staff orientations.

Due to the rural nature of Coconino County, there is a real need to get informative, up-to-date educational material to residents, many of whom have moved from out of state and are unaware of Coconino County's current solid waste and recycling programs. The County wants to contribute to the partnership by providing updated reduce, reuse and recycling information, increasing recycling rates and decreasing contamination. This new effort in the various news medias would be evidence of community cooperation and would truly enhance the viability of recycling and diversion from the landfill.

By making all aspects of the recycling program more visible, using several outreach methods and providing a unified message, the Partnership measures 10% increased tonnage to the Flagstaff Materials Recovery Facility (MRF). Contamination at the MRF decreases, as measured by waste surveys, and recyclables buried at the landfill decrease.

### **3) Partnerships and Organization Background**

NORTHERN ARIZONA UNIVERSITY has managed recycling programs on the Flagstaff campus since 1991, reaching a peak of 1400 tons per year recycled in 2000. This program was merged with the City of Flagstaff's recycling collection system in 2003, with annual collected tonnage at an average of 800 tons per year. The present system is managed by the Capital Assets Division who oversees janitorial collection staff and intergovernmental collection contracts. Jan Kerata, NAU/Merriam-Powell Center for Environmental Research staff and Partnership Program Coordinator, has been involved in regional recycling education since 1990. Her efforts as recycling coordinator for the City of Flagstaff from 1990 - 97 led to the establishment of curbside recycling programs for households and businesses as well as the household hazardous waste collection program.

CITY OF FLAGSTAFF - The City began its recycling efforts in 1990 with the hiring of a single part-time recycling coordinator. Office paper was collected from City facilities, courts, police, city hall, and the library. A voluntary drop off container was provided in the downtown area for businesses, and the public schools began to collect paper in City provided bins. In 1991 the City

of Flagstaff ran a six month pilot curbside recycling collection of materials in several neighborhoods. Newspaper, aluminum, steel, cardboard, plastic and glass were collected. The pilot program led to the approval of unmanned drop off centers. The program grew steadily over the years and in 1998, with the help of ADEQ recycling grant funds, the City worked with Norton Environmental to open a Materials Recovery Facility and began a residential curbside recycling program. Today the City of Flagstaff's Environmental Services Division collects recycling materials from over 16,000 residential single family homes. Over 14,000 tons of recyclables were diverted from the landfill and sent to recycling markets last year. Our goal is to collect 15,600 tons in 2008. Through other programs the City also recycles Christmas trees, green waste, appliances, and phone books, maintains five public drop-off locations for glass recycling, and operates a Hazardous Products Collection Center.

COCONINO COUNTY PUBLIC WORKS DEPARTMENT - Coconino County started recycling services for residents at the Transfer stations in 1992. A brochure was developed and distributed to county residents in 1999 regarding a new rate structure and included informative recycling information. Coconino County also has overseen the waste tire collection sites since 1992 with approximately 100,000 waste tires collected each year. The Solid Waste Division sponsors approximately 14 residential community clean-up days per year for debris and forest material. County residents are eligible to use the Norton MRF drop off site and the City of Flagstaff's household hazardous waste program. Coconino County has entered into many cooperative agreements with the City of Flagstaff regarding County residents' use of the landfill, the household hazardous waste facility and the MRF, and in hauling solid waste from the transfer stations.

WILLOW BEND ENVIRONMENTAL EDUCATION CENTER - Willow Bend has a rich, thirty-year history of providing place-based environmental education that fosters an ethic of stewardship and responsibility by deepening people's understanding of and connections to nature. In all of our programs, we strive to build the kind of world--socially, environmentally, and economically, that we want to live in, and which we want our children to inherit. Last year, Willow Bend staff made environmental education presentations to over 16,000 students while teaching at schools in Flagstaff, Williams, Parks, Fredonia, and Leupp. WBEEC offers tours of the Flagstaff MRF, hosts family science events, and welcomes drop-in visitors to our Discovery Room. Each year, Willow Bend hosts over 1,100 students for Willow Bend field trips to the Discovery Room featuring the theme, "Its Easy Being Green".

PARTNERS IN RECYCLING EDUCATION – our combined efforts disperse expenses and concentrate efforts in the areas of need for each Partner. The initial assessments target the strongest need areas and public education materials are developed accordingly. The Partners meet quarterly to direct the Outreach Coordinator's efforts and gauge program effectiveness in all areas.

#### **4) Time Line, Tasks & Deliverables Narrative**

The Partnership develops a student-centered program at Northern Arizona University to:

1. Assess the effectiveness of recycling programs at NAU, the City of Flagstaff, Coconino County and Flagstaff Unified Schools,
2. Define how the partners work together, and
3. Create common educational materials. It also provides a framework for continuing education, increases the regional capacity for recycling, and decreases contamination.

Methodology: Since the recyclable materials are the same for each partner's program, the educational outreach pieces developed will be based on our common theme: "Recycle – we're all in this together!" A student is hired to assess each program's current participation status, to create educational materials used by all partners, to distribute those materials on campus, among partners, with media outlets and at special events. Updated waste diversion information is distributed to the NAU and FUSD administrators, staff, teachers and students, City and County personnel and residents.

Willow Bend's Classroom Programs complement the adult education and outreach of the Partnership for Recycling Education's campaign with 3R's awareness and education of students in kindergarten through 12th grade. Providing 3 R's education to the students not only shepherds and educates the next generation of recyclers, but impacts the current generation of adults. Students will take the information home and will have influence and impact on the recycling behavior of their parents and siblings. Willow Bend's programs are presented to K – 12 classrooms in three programs: Materials Life Cycles (new), Recycling Rules and Trees to Paper (updated), reaching 50 classrooms. Willow Bend staff participates in three community outreach events: Earth Day, the Flagstaff Festival of Science and America Recycles Day, with contact to an estimated 1,200 people.

The City of Flagstaff's Environmental Program Assistant works with students at three area high schools to improve recycling among students, teachers and staff. The Advanced Placement Environmental Studies students at Sinagua High School have recently completed a survey of teachers and students documenting recycling behavior and attitudes. They have approached the City of Flagstaff and Willow Bend Environmental Education Center for statistics, educational information, and logistical assistance in planning and implementing a more robust recycling system at their school. The City will work with additional student groups at Coconino and Flagstaff High Schools to implement stronger, more cohesive recycling programs in their schools. Educational materials developed through the grant and recycling containers for commons areas are provided to each high school. City staff provides educational materials and guidance to the students and staff attends school group meetings. Willow Bend provides Materials Life Cycle classroom programs.

Initial program assessments take place on NAU campus, at the MRF, at the County transfer stations and the Cinder Lakes landfill. Program similarities and differences are identified, along with elements that work well and those that need improvement. This method is repeated at the end of the project period to evaluate efforts. The Outreach Coordinator reports to the Project Coordinator based at NAU's Merriam-Powell Center and coordinates efforts with Partners throughout the year.

Deliverables for this initiative are print advertising, radio ads, bus ads, flyers and other materials with the common recycling education themes. Emphasis is on reduce, reuse, recycle with clear identification of recyclable materials and contaminants.

- Print ads are developed for the City's quarterly newsletter, CityScope, the *Arizona Daily Sun*, the NAU *Lumberjack* and *Mountain Living* magazine, highlighting program affiliations, modifications and progress. Partner web sites are linked, articles are broadcast through the campus e-newsletter "Inside NAU" and notices are placed in the City's utility bills. Updated recycling information is printed in the County's annual report, which is mailed to County residents, and in the County's internal weekly newsletter.
- Advertising is purchased for Flagstaff's Mountain Line buses and for the recycling collection vehicles.
- Flyers and posters are printed for distribution as newspaper inserts, for posting on campus, distribution at the County transfer stations, to major regional employers and the Cinder Lakes Landfill.
- Radio ads are purchased with KNAU, KAFF, KZGL AND KMGN. KNAU is NAU's National Public Radio affiliate. Included are Public Service Announcements and listing in the Events calendar.
- Seasonal promotion at special events such as the Flagstaff Festival of Science, America Recycles Day, winter holiday season special events, Earth Day, and the 4<sup>th</sup> of July Festival in downtown Flagstaff.
- Specially printed pencils and stickers are distributed at outreach events with the message "recycle – we're all in this together!"
- Fifty classroom presentations will be conducted by Willow Bend staff in grades K – 12, including Materials Life Cycles, Recycling Rules and Trees to Paper. Curriculum development and educational program coordination are provided by staff.
- Fifteen classroom field trips to the Willow Bend Discovery Room for landfill, recycling and composting activities.

- Outreach by City staff is increased in the three high schools and includes reinforced recycling messages, classroom presentations and recycling bins for common areas.
- Pre and post program waste surveys are performed at the MRF to establish baseline participation rates and contamination percentages.

**Timeline:**

July 1 – September 30, 2008 - Hire student, develop and distribute Partner assessments, meet with Partners, begin outreach materials production and distribution, seasonal outreach at the Flagstaff Festival of Science and campus move-in. Perform recyclables survey at MRF. Draft 1<sup>st</sup> quarterly report.

October 1 – December 31, 2008

Initial assessment completed, programs in schools, meet with project partners, print and radio advertising implemented, seasonal outreach at America Recycles Day. Draft 2<sup>nd</sup> quarterly report.

January 1 – March 30, 2009

Collate assessment and recycling data, programs in schools, meet with project partners, continue outreach, ongoing evaluation, highlight return to campus. Draft 3<sup>rd</sup> quarterly report

April 1 - June 30, 2009

Post program project assessment, meet with project partners, outreach at Earth Day events, perform recyclables survey at MRF. Draft 4th and final reports.