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Executive Summary

- The team showcased their clean up efforts to the Assistant Secretary of the Interior.
- Work continued on the development of an adopt-a-block/parcel program to address the litter and desert dumping problems that exist in the urban-public land interfaces throughout Clark County.
- The team has sent a representative to serve on the City of Las Vegas Keep America Beautiful task force.
- The team began collaboration with the Howard Hughes Corporation on a desert clean up.
- The recycling feasibility report was presented and approved by the SNAP board.
- The team made substantial progress on the completion of a strategic plan.
- A working model of the GPS unit to be used by volunteers for the GIS database project was developed.
- Phase III media campaign continued.
- Seven clean-up events were conducted this quarter.
- The team provided 495 cubic yards of roll-off space for clean-ups.

Summary of Attachments

- Meeting Agendas
- Strategic planning documents
- SNAP recycling feasibility report

Collaboration with Interagency Teams

The Interagency Anti-Litter Team met four times this quarter: July 22, August 18, September 15, and September 23, 2009 (see attached agendas for details). The team continues to meet on a monthly basis and is providing direction on all four subtasks as detailed below.
**Task 1: Strategic Planning and Project Management.**

**Assistant Secretary Visit**
Representatives of the Anti-Litter Team met with the Assistant Secretary of the Interior during her visit to Las Vegas. She toured the Great Unconformity during her visit and learned about the combined methods of the interagency team for combating the desert dumping problem in that area. The team representatives discussed the alternative workforce crews and the efforts of the adoption efforts of the local middle school at this location. The educational outreach taking place at the Great Unconformity, the success of the interagency work and the productive partnership with the university were also discussed.

**Collaborative Efforts**
The team continued working with the Southern Nevada Health District (SNHD), Clark County Community Liaisons, and representatives from Clark County Code Enforcement and Air Quality and Environmental Management (DAQEM) on the adopt a block/parcel concept. A representative from the team attended the DAQEM monthly meeting to discuss ideas for further collaborations to assist the airport authorities in their desert dumping clean-ups.

The City of Las Vegas invited a representative from the Anti-litter team to join their Keep America Beautiful (KAB) task force. The Anti-litter project manager was sent as the representative. The task force is composed of representatives from Republic Services, the Nevada Department of Transportation, the Southern Nevada Water Authority, the Adopt a Highway council, the Nevada Conservation League, the Bank of Nevada, UNLV Rebel Recycling, the City of Las Vegas Neighborhood Services and the City of Las Vegas Code Enforcement.

In partnering with Keep America Beautiful the City of Las Vegas must undertake a pre-certification process. The process includes developing a strategic plan and conducting a litter index survey. The Anti-litter team project manager will be assisting with the litter index survey. This will greatly enhance the usefulness of the GIS database the team is developing. The KAB measurement standards will serve as an overall assessment item in the field form, strengthening the ability of the team to collaborate with municipalities throughout the region and nation.

In August the Howard Hughes Corporation contacted the Anti-litter team project manager seeking to collaborate on a desert clean-up in south Summerlin. The team fully supported the collaboration and assisted in the planning and publicizing of the event, scheduled for October 17, 2009.

Substantial work took place on the development of the SNAP strategic plan for litter and desert dumping in this quarter. The team held a retreat to focus on the strategic plan during which they participated in a visioning exercise, conducted a strengths, weaknesses, opportunities and threats analysis (see attachments for results), examined current strategies, and identified issues that the team faces and brainstormed strategies. A follow-up meeting was scheduled during which the team further developed the strategies, and began identification of action items and performance indicators.

**Recycling Efforts**
The team revised the report developed by Zia Engineering and submitted the final draft for SNAP board approval (see attachments). The team met with the board on September 25th at which time the board approved the study and indicated they will discuss the next steps that need to be taken.

**GIS Project Planning and Management**
The team continues to work on plans for a GIS database project for litter and dumping. The data field form went through a final revision based on the Keep America Beautiful litter index. It was decided that the form will be used on GPS units for initial inventorying. A paper form combined with a web based data entry form will be developed for volunteers to use during their monitoring efforts.

**Task 2: Messaging Campaign**

The Phase III media campaign continued with print ads being run in the major Spanish speaking newspaper, radio ads on Spanish and English speaking stations and billboards in both English and Spanish being displayed.

Poster production began when it was determined the team would have access to electronic versions that could be used in multiple publications. Shooters and picnickers are the target audience of the posters.

**Program Website**

The Don’t Trash Nevada official Web site ([www.donttrashnevada.org](http://www.donttrashnevada.org)) launched on October 12, 2006. The site includes information related to illegal dumping and litter prevention, clean-up events, recycling, household hazardous waste management, and the anti-litter pledge. Data for the period of July - October 2009 indicate 89,597 successful server requests, and 16,993 successful page requests (See Figure 1 below). During August 2009 the website migrated to a new server which impacted the collection of the statistics.

**Community Outreach**

The Take Pride in America Southern Nevada Team attended 2 community outreach events. Staffed by the Public Lands Institute, these events are an opportunity to raise awareness of the litter and desert dumping problem. Individuals are encouraged to sign the Don’t Trash Nevada pledge by offering them a reusable shopping bag. Table 1 contains a summary of the contacts made.

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**Figure 1** shows Don’t Trash Nevada quarterly web traffic since the site went live.
In addition, the SNAP Hispanic Outreach Plan, developed by the Conservation Education team, involved contracting with Language Sources to develop interactive booth games and a Spanish comic book featuring Super Hector. Language Sources took these booth games and comic books to various Hispanic community events, raising awareness of the litter and dumping problems in a key target audience.

**Table 1. Community Outreach Attendance July-September**

<table>
<thead>
<tr>
<th>Date</th>
<th>Fair Name</th>
<th>Total Signed up</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/03/09</td>
<td>Rebel Service Gives Back</td>
<td>15</td>
</tr>
<tr>
<td>09/07/09</td>
<td>New UNLV Staff/ Faculty Fair</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>35</td>
</tr>
</tbody>
</table>

Table 1 shows the number of contacts made at community outreach events and the pledges that resulted from these contacts.

**Task 3: Litter and Desert Dumping Clean-ups**

A total of 430 volunteers, donated 1744 hours to our public lands during seven volunteer events. According to the Independent Sector, which provides data for calculating the economic impact of volunteers, the volunteer events this quarter have had an economic impact of $35,316.00 (See Figures 2-7 on the next pages).

![Number of volunteer clean-ups by quarter](chart)

Figure 2 shows the number of events per quarter since program inception.
Figure 3 shows the number of volunteers participating in events each quarter since program inception.

Figure 4 shows volunteer hours contributed each quarter since program inception.

Figure 5 shows the value of volunteer hours since program inception in dollars and cents.
Figure 6 shows the number of cubic yards of waste removed from public lands by volunteers.
Figure 7 compares the volume of trash removed from public lands since program inception to a popular monument.
Volunteer Clean-Up Events

Spring Mountain Sweep the Peak Monthly Event
July 11, 2009 - Spring Mountains - USFS
32 volunteers helped the USFS remove 63 bags of trash from a fuel reduction area in Lee Canyon.

Spring Mountain Sweep the Peak Monthly Event
August 8, 2009 - Spring Mountains – USFS
21 volunteers removed 150 pounds of trash from the Hilltop Road area in the Spring Mountains National Recreation Area

Spring Mountain Sweep the Peak Monthly Event
September 12, 2009 - Spring Mountains – USFS
19 volunteers removed 800 pounds of trash from the Harris Springs Road area in the Spring Mountains National Recreation Area

Conservation Transfer Area (CTA) Clean-Up
September 19, 2009 - CTA (North End of Decatur Rd. Las Vegas) - BLM
The BLM continued their clean-up efforts at the Conservation Transfer Area (CTA) located on the north end of Decatur Rd. in Las Vegas where 23 volunteers cleaned up 85 cubic yards of household as well as construction debris.

Desert Oasis High School Clean-Up
September 25, 2009 – Desert Oasis Area - BLM
Approximately 175 high school students joined forces with the BLM and removed 80 cubic yards of debris from the desert areas surrounding their high school.

National Public Lands Day – Jean Dry Lake Area
September 26, 2009 - Jean Dry Lake Area - BLM
In recognition and celebration of National Public Lands Day the BLM worked with Boy Scout Troop 949 and the Nevada Rangers Shooting Club, for a total of 43 volunteers, and conducted a large scale clean-up at the Jean Dry Lake Area. This area is riddled with spent shotgun casings and shot up debris (i.e., Jacuzzi tub, wood, household items). They were able to clean three shoot sites and removed 47 cubic yards of debris.

National Public Lands Day – Logandale Trails
September 26, 2009 - Logandale Area - BLM
A group of 34 Off Highway Vehicle users spent six hours marking and cleaning up trails in the Logandale area. They picked up a total of 7 cubic yards of waste.
National Public Lands Day – Red Rock Canyon
September 26, 2009 - Red Rock Canyon - BLM
In partnership, the BLM and Friends of Red Rock, completed a goal of eradicating unauthorized OHV trails. 10 routes were visibly eliminated. The eradication efforts covered approximately 1.5 miles and consisted of vertical mulching, installing Carsonite signage as well as installing physical barriers. Two youth groups and several adult groups, for a total of 67 volunteers, collected trash from multiple areas – these efforts filled a 35 cubic yard dumpster with building supplies, parts of a boat, bedsprings, computer components, and a great deal of trash.

National Public Lands Day - Boulder Harbor
September 26, 2009 - Lake Mead National Recreation Area - NPS
As a part of National Public Lands Day, 94 volunteers picked up 18 cubic yards of trash and debris from the area, plus 1200 lbs of glass in three hours.

<table>
<thead>
<tr>
<th>Date</th>
<th>Agency</th>
<th>Location</th>
<th>Nature of Work</th>
<th># of Volunteers</th>
<th>Accomplishments</th>
<th>Total Volunteer Hours</th>
<th>Cubic Yards removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>07-11-09</td>
<td>USFS</td>
<td>Lee Canyon</td>
<td>Clean Up</td>
<td>32</td>
<td>Removed 63 bags of trash from a fuel reduction area.</td>
<td>64</td>
<td>5.25</td>
</tr>
<tr>
<td>08-08-09</td>
<td>USFS</td>
<td>Hilltop Rd</td>
<td>Clean Up</td>
<td>29</td>
<td>150 pounds of trash removed.</td>
<td>58</td>
<td>0.5</td>
</tr>
<tr>
<td>09-12-09</td>
<td>USFS</td>
<td>Harris Springs Rd.</td>
<td>Clean Up</td>
<td>19</td>
<td>800 pounds of trash removed.</td>
<td>38</td>
<td>2.3</td>
</tr>
<tr>
<td>09-19-09</td>
<td>BLM</td>
<td>Conservation Transfer Area (CTA) – North End of Decatur Rd. Las Vegas</td>
<td>CTA Desert Clean up</td>
<td>23</td>
<td>Cleaned up 85 cubic yards of household as well as construction debris.</td>
<td>103</td>
<td>85</td>
</tr>
<tr>
<td>09-25-09</td>
<td>BLM</td>
<td>Desert Oasis HS</td>
<td>Clean Up</td>
<td>137</td>
<td>Students removed 75 cubic yards of debris</td>
<td>548</td>
<td>75</td>
</tr>
<tr>
<td>Date</td>
<td>Agency</td>
<td>Location/Event Details</td>
<td>Action</td>
<td>Yards</td>
<td>Comments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>-------------------------</td>
<td>--------</td>
<td>-------</td>
<td>----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09-26-09</td>
<td>BLM</td>
<td>Jean Dry Lake Clean up</td>
<td>Clean Up</td>
<td>43</td>
<td>Cleaned three shoot sites and removed 47 cubic yards of debris.</td>
<td>193</td>
<td>47</td>
</tr>
<tr>
<td>09-26-09</td>
<td>BLM</td>
<td>Red Rock Canyon</td>
<td>Clean Up</td>
<td>67</td>
<td>Eradicated 10 unauthorized OHV trails and filled one 35 cubic yard dumpster.</td>
<td>350</td>
<td>35</td>
</tr>
<tr>
<td>09-26-09</td>
<td>BLM</td>
<td>Logandale Trails NPLD event</td>
<td>NPLD event</td>
<td>34</td>
<td>removed 7 cubic yards of trash</td>
<td>204</td>
<td>7</td>
</tr>
<tr>
<td>09-26-09</td>
<td>NPS</td>
<td>Lake Mead National Recreation Area Litter Clean Up</td>
<td>Litter Clean Up</td>
<td>94</td>
<td>Picked up 18 cubic yards of trash and debris, and 1200 lbs of glass.</td>
<td>282</td>
<td>18</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
<td>1840</td>
<td>240.35</td>
</tr>
</tbody>
</table>

**Additional Dumpsters and Roll-off**

In this quarter, Take Pride in America in Southern Nevada supported multiple clean-up efforts with the roll-offs needed to remove the waste. The team provided 495 cubic yards of roll off space.

**Task 4: Judicial System Analysis**

On October 26, 2006, a draft Judicial System Analysis report was presented to the Interagency Law Enforcement Team for review. The Judicial Analysis was determined to be complete by the SNAP Executive Director on February 23, 2007. The Executive Director requested that the Law Enforcement Team provide written comments to include within the Judicial Analysis. Once these comments are incorporated into the report, it will be submitted in compliance with the task agreement.

Submitted by: Margaret N. Rees, Principal Investigator

October 5, 2009
Date
Meeting Agendas
**Anti-Litter Team**  
*Meeting Agenda*  
*July 22, 2009*

**Meeting Called By:** Erika Schumacher, team lead  
**Participants:** Beth Barrie, Gordon Gilbert, Bob Loudon, Amy Sprunger,  

**Location:** Interagency Office, Conference Room A  

**Guests:** Richard Hertzberg (Zia Contracting), Heather Whitesides

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
<th>Time</th>
<th>Item</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 AM</td>
<td>9:15 AM</td>
<td>0:15</td>
<td><strong>Round Table:</strong> Team will share updates.</td>
<td>Team Members</td>
</tr>
<tr>
<td>9:15 AM</td>
<td>9:45 AM</td>
<td>0:30</td>
<td><strong>Recycling Plan Review:</strong> Team will review draft of plan to prepare for conference call with Zia consultant</td>
<td>Beth Barrie</td>
</tr>
<tr>
<td>9:45 AM</td>
<td>10:00 AM</td>
<td>0:15</td>
<td><strong>Break</strong></td>
<td></td>
</tr>
<tr>
<td>10:00 AM</td>
<td>10:45 AM</td>
<td>0:45</td>
<td><strong>Recycling Plan Review (continued):</strong> Team will discuss needed revisions with consultant.</td>
<td>Beth Barrie</td>
</tr>
<tr>
<td>10:45 AM</td>
<td>11:00 AM</td>
<td>0:15</td>
<td><strong>Team lead meeting review:</strong> Erika will share updates from SNAP team lead meeting</td>
<td>Erika Schumacher</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>11:30 AM</td>
<td>0:30</td>
<td><strong>Litter Literature Review:</strong> Team will receive highlights of literature review</td>
<td>Beth Barrie</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>12:00 PM</td>
<td>0:30</td>
<td><strong>Strategic Plan Template Review:</strong> Team will review SNAP LE strategic planning document</td>
<td>Erika Schumacher</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>12:30 PM</td>
<td>0:30</td>
<td><strong>Retreat Planning:</strong> Team will decide final date and review agenda items</td>
<td>Beth Barrie</td>
</tr>
</tbody>
</table>

**Total**  
**3:30**
**Anti-Litter Team**  
**Retreat Agenda**  
**August 18, 2009**

**Meeting Called By:** Erika Schumacher, team lead  
**Participants:** Beth Barrie, Nancy Bernard, Dan Chase, Gordon Gilbert, Bob Loudon, Amy Sprunger  
**Location:** REI conference room

**Guests:** Heather Whitesides

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
<th>Time</th>
<th>Item</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 AM</td>
<td>9:30 AM</td>
<td>0:30</td>
<td>Visioning Exercise</td>
<td>Team Members</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>10:30 AM</td>
<td>1:00</td>
<td><strong>SWOT &amp; Current Strategy Review:</strong> The team will compare the current strategies with the SWOT to identify gaps.</td>
<td>Beth Barrie</td>
</tr>
<tr>
<td>10:30 AM</td>
<td>10:45 AM</td>
<td>0:15</td>
<td><strong>Break</strong></td>
<td></td>
</tr>
<tr>
<td>10:45 AM</td>
<td>11:45 AM</td>
<td>1:00</td>
<td><strong>Next Steps Analysis:</strong> The team will examine the next steps identified in the review to group similar actions together, creating categories for the strategic plan.</td>
<td>Beth Barrie</td>
</tr>
<tr>
<td>11:45 AM</td>
<td>12:15 PM</td>
<td>0:30</td>
<td><strong>Charter Review:</strong> The team will review and revise charter as needed with special attention given to the appropriateness of the current vision, mission and goals.</td>
<td>Erika Schumacher</td>
</tr>
<tr>
<td>12:15 PM</td>
<td>1:15 PM</td>
<td>1:00</td>
<td><strong>Deliverables Review:</strong> The team will review deliverables for each round in preparation for setting objectives.</td>
<td>Erika Schumacher</td>
</tr>
<tr>
<td>1:15 PM</td>
<td>1:45 PM</td>
<td>0:30</td>
<td><strong>Break</strong></td>
<td></td>
</tr>
<tr>
<td>1:45 PM</td>
<td>2:00 PM</td>
<td>0:15</td>
<td><strong>Objective Setting:</strong> The team will set objectives for each category of the plan.</td>
<td>Beth Barrie</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>3:30 PM</td>
<td>1:30</td>
<td><strong>Action Steps Selection:</strong> The team will identify action steps for meeting identified objectives.</td>
<td>Beth Barrie</td>
</tr>
<tr>
<td>3:30 PM</td>
<td>5:00 PM</td>
<td>1:30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total 8:00**
Anti-Litter Team
Meeting Agenda
September 15, 2009

Meeting Called By: Erika Schumacher, team lead
Participants: Beth Barrie, Nancy Bernard, Gordon Gilbert, Bob Loudon, Amy Sprunger,

Location: Interagency Office, District Managers Conference Room

Guests: none

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
<th>Time</th>
<th>Item</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 AM</td>
<td>11:00 AM</td>
<td>2:00</td>
<td><strong>Recycling Plan Finalization:</strong> Team will finalize details of the recycling which will be presented to the SNAP board Friday, September 18th.</td>
<td>Team Members</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>12:00 PM</td>
<td>1:00</td>
<td><strong>Charter review:</strong> Team will review and update vision, mission, core values and long term goals of the charter (sections 1-10).</td>
<td>Team Members</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>1:00 PM</td>
<td>1:00</td>
<td><strong>Lunch</strong></td>
<td></td>
</tr>
<tr>
<td>1:00 PM</td>
<td>3:00 PM</td>
<td>2:00</td>
<td><strong>Charter Review (continued):</strong> Team will review and update sections 4-10 of the charter.</td>
<td>Team Members</td>
</tr>
</tbody>
</table>

Total 6:00
Anti-Litter Team
Meeting Agenda
September 23, 2009

Meeting Called By: Erika Schumacher, team lead
Participants: Beth Barrie, Nancy Bernard, Dan Chase, Gordon Gilbert, Amy Sprunger,

Location: Interagency Office, Forest Service Conference Room

Guests: none

<table>
<thead>
<tr>
<th>Start</th>
<th>End</th>
<th>Time</th>
<th>Item</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 AM</td>
<td>9:45 AM</td>
<td>0:45</td>
<td>Round Table: Team members will provide updates.</td>
<td>Team Members</td>
</tr>
<tr>
<td>9:45 AM</td>
<td>12:15 PM</td>
<td>2:30</td>
<td>Strategic Plan Finalization: Team will finalize</td>
<td>Team Members</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>details of the strategic plan which will be</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>presented to the SNAP board in</td>
<td></td>
</tr>
<tr>
<td>12:15 PM</td>
<td>1:15 PM</td>
<td>1:00</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>1:15 PM</td>
<td>1:45 PM</td>
<td>0:30</td>
<td>Strategic Plan (continued)</td>
<td>Team Members</td>
</tr>
<tr>
<td>1:45 PM</td>
<td>2:00 PM</td>
<td>0:15</td>
<td>Event Updates: Team will be briefed on fall</td>
<td>Beth Barrie</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>litter events.</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>5:00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Strategic Planning Documents
In your mind’s eye, please think quietly and deeply about the following imaginary experience.

This year, for some reason, it became necessary to leave the Anti-litter team and move hundreds of miles away. You made the move and weren’t able to keep up on the efforts of the team over the years. 20 years later you get a chance to go back for a visit. Twenty years is a long time – not a lifetime, but enough time to notice changes.

As you wander through the community you left, you happen to meet with each of four people, a resident, a high school sophomore, a business owner, and an agency official. During your meeting you get a chance to discuss Don’t Trash Nevada with them.

What would you like each of these people to say about Don’t Trash Nevada? What impact did it have on litter and desert dumping? What kind of effort is it today? What is its value to the community? What kind of reputation does it have? What difference, if any, does it make in the lives of these people? What have been the greatest accomplishments since you moved? What was the main purpose for its existence?

In the space below, summarize what each person told you.

1. The resident

2. The high school sophomore

3. The business owner

4. The agency official
RESIDENTS

Increases home values.
Remains clean.
Creates a sense of community.
I know why it’s a bad thing to do.
Embracing areas.
Successful adopt a block-neighborhood watching
Litter is not a problem anymore.
Outskirts are clean.
Everyone helps enforce antilittering.
Significant increase in recycling even in compost.
Reduced the amount of trash brought to dumps.

SOPHOMORE

Seen pictures but don’t remember.
Enjoy volunteering for DTN-taught me why it’s bad to litter.
It’s always been a part of school.
I like how it’s part of my science education.
Las Vegas is a model community.
Helps me be able to care for the environment.

BUSINESS OWNER

Enjoy sharing success stories with other colleagues.
It’s so much easier to do our recycling now.
Value of business has gone up, crime down, and cleaner community.
DTN developed a stronger sense of community and population that doesn’t fluctuate resulting in a stable community.

More eco-friendly packaging/less packaging now.

Moved here from the Northwest because Vegas is so “green”.

Like the incentives to recycle.

Promoting/sponsoring is a good return on investment

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AGENCY

It is a pleasure working with such a well organized group.

Only litter here is historic protected littler.

Don't trash nation.

Amount of litter drastically down and recycling is everywhere and ingrained in not only employees but visitors “everybody knows what to do.”

Tourism marketing promotes pristine public lands more that strip.

All agency meetings own goals and DTN is a unified message.

Nice to see it grow state wide.

Nice that the program is so sustainable through all the partnerships.
<table>
<thead>
<tr>
<th>SWOT Element</th>
<th>Identify Current or Potential Strategy</th>
<th>Improvements Needed &amp;/or Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leveraging Strengths</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outreach we have done over the past 1.5 years. Clark County schools, county health, SNAP and each of the four agencies has been great.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Majority of our team is passionate about what we do.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLI relationship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We are out cleaning the desert and making the communities aware of our litter message</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team is focused and works well together. Great strides have been made towards clean up of public lands with lots of volunteer efforts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWOT Element</td>
<td>Identify Current or Potential Strategy</td>
<td>Improvements Needed &amp;/or Next Steps</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td><strong>Mitigating Weaknesses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Everyone has too much on their plates.</td>
<td>Too much to do and little to no time to do what needs to get done</td>
<td></td>
</tr>
<tr>
<td>Addition of recycling, we need to get Anti-litter program in a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>better direction too many priorities w/o the board understanding what it</td>
<td></td>
<td></td>
</tr>
<tr>
<td>takes to get the job done.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLM being in the middle of the valley hard to balance what’s SNAP and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>what’s the rest of it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working with other teams (education, PIO, etc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision is very challenging.</td>
<td>Could it be more refined? We need to think big, but how do we measure an accomplishment against this</td>
<td></td>
</tr>
<tr>
<td>vision?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re: the mission, have we identified root causes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWOT Element</td>
<td>Identify Current or Potential Strategy</td>
<td>Improvements Needed &amp;/or Next Steps</td>
</tr>
<tr>
<td>--------------</td>
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<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>Taking advantage of opportunities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy to sell us and what we do.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partnerships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many programs that can recognize what we do</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We need to work with other teams to get their buy-in and be able to do some of what we need to get accomplished.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consider working more with the EE team, and maybe volunteers, to cover more ground regarding education of LV residents.</td>
<td>Should we try taking message (anti-litter) to the schools more? How? How can we use HECTOR most effectively?</td>
<td></td>
</tr>
</tbody>
</table>
### SWOT Element

<table>
<thead>
<tr>
<th>SWOT Element</th>
<th>Identify Current or Potential Strategy</th>
<th>Improvements Needed &amp;/or Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mitigating threats</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>loss of money</td>
<td></td>
<td></td>
</tr>
<tr>
<td>too many interests (e.g. recycling)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not sharing what we do to our agencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainability is the threat to all conservation initiative teams.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TAKE PRIDE IN AMERICA IN SOUTHERN NEVADA

RECYCLING FEASIBILITY STUDY

PRESENTED TO THE SOUTHERN NEVADA AGENCY PARTNERSHIP BOARD OF DIRECTORS

FRIDAY, SEPTEMBER 25, 2009

Developed By:
Erika Schumacher, Team Lead, Bureau of Land Management
Nancy Bernard, National Park Service
Bob Loudon, U.S. Forest Service
Amy Sprunger, U.S. Fish and Wildlife Service
Beth Barrie, Project Manager, Public Lands Institute
BACKGROUND INFORMATION

At the request of the Southern Nevada Agency Partnership (SNAP) Board of Directors, the Take Pride in America in Southern Nevada Litter and Desert Dumping Team conducted a recycling feasibility study. Portions of the study were completed by Zia Engineering and Environmental Consultants, LLC a contracting firm with expertise in waste minimization and recycling planning. The study includes the following components:

- Documentation of current federal guidelines and policy regarding waste diversion
- Examination of current SNAP recycling efforts
- Options for future recycling efforts (including price estimates)
- Conclusions

DOCUMENTATION OF CURRENT FEDERAL GUIDELINES AND POLICY REGARDING WASTE DIVERSION

Executive Order 13101 – Greening the Government Through Waste Prevention, Recycling and Federal Acquisition (1998) – requires the director of each executive agency to incorporate waste prevention and recycling in the agency’s daily operations. In addition, each agency must establish a goal for waste prevention / recycling or an overall goal for waste diversion to be achieved by January 1, 2000 and long-term goals to be achieved by the years 2005 and 2010.

The Department of the Interior has prepared a Strategic Plan for Greening the Department of the Interior Through Waste Prevention, Recycling and Federal Acquisition (2000; see Appendix A). This Plan sets target goals for diversion of waste from disposal by recycling for DOI offices, facilities, operations, and recreational land at the rate of 40% by the year 2000, 45% by the year 2005, and 50% by the year 2010. Materials identified for recycling unless significant barriers are determined to exist (such as lack of markets and / or cost) are: white paper, mixed paper, newspaper, cardboard, aluminum, plastic (#1 PET, #2 HDPE), glass, pallets, scrap metal, toner cartridges, and consistent with applicable hazardous waste regulations, fluorescent lamps and ballasts, batteries, used oil, antifreeze and tires.

The Department of Agriculture is pursuing a variety of sustainability initiatives in its operations (see Appendix B). Within the DOA’s Waste Prevention and Recycling Footprint Focus Area the following Pollution Prevention goal has been defined: Achieve 40% waste diversion by 2010 and exceed sustainable waste prevention and recycling business practices throughout all Forest Service program activities (http://www.fs.fed.us/sustainableoperations/focus‐area‐waste‐prevention‐recycling.shtml).

EXAMINATION OF CURRENT SNAP RECYCLING EFFORTS

Internally, SNAP recycling efforts include:

- The Interagency Office - Employees put white paper into 65 gallon carts in back of the main building. These carts are serviced by Republic Services. Employees recycle aluminum cans and plastics on their own initiative.
- U.S. Forest Service Kyle Canyon Administrative Offices – Nevada Construction Clean Up Inc., services a 6 yard dumpster in which employees place materials for recycling.
• Lake Mead National Recreation Area – The maintenance staff have been regularly collecting aluminum and plastic recyclable material and transporting it to Boulder City Disposal for recycling. Boulder City Disposal pick-up on an on call basis cardboard from the Headquarters Building, Warehouse Complex and the Alan Bible Visitor Center. Paper is recycled through a contract with our janitorial contractor every Tuesday and Thursday. At the Warehouse Complex, a roll-off container is provided for metal products. When the container is full, Maintenance calls for a pick-up. At the Lake Mead Nursery, vegetation is composted and utilized in the nursery. Currently a pilot test is being conducted with Boulder City Disposal at the NPS Warehouse location to provide employees with the opportunity to comingle recycling materials into a larger roll-off there being serviced by Boulder City Disposal.

• Desert National Wildlife Refuge Corn Creek Field Station – Employees recycle materials on their own initiative.

External recycling efforts (i.e., opportunities for visitors to recycle) include:

• U.S. Forest Service Campgrounds – The concessioner for the campgrounds began contracting with Nevada Construction Clean Up, Inc. in the summer of 2009 to provide visitors with opportunities to recycle everything except glass and food waste.

• Lake Mead National Recreation Area – At Alan Bible Visitor Center recycling containers are placed near the trash cans to collect plastic and aluminum. NPS maintenance staff regularly collect these materials are transport them to Boulder City Disposal. During the pilot test with Boulder City Disposal the maintenance staff will bring these materials to the Warehouse location. Concessioners at the marinas provide opportunities for visitors to recycle aluminum cans, plastic containers, and cardboard and other paper generated in the concessions operations.

• Desert National Wildlife Refuge – Recycling containers are located at the visitor contact station for paper, plastic & cans, and glass.

OPTIONS FOR FUTURE RECYCLING EFFORTS

Examination of current recycling efforts revealed that external recycling options need to be developed for SNAP agencies to provide opportunities for visitors to recycle. These external recycling options could then be applied to internal recyclable materials, enhancing the level of internal recycling. The options for external recycling that were investigated include:

• Strategically located recycling containers
• Centralized collection point operations
• Full service recycling contracts

**Strategically located recycling containers** are 3-6 yard dumpsters into which visitors empty all of their recyclable materials (excluding glass and food waste). This option has been used successfully by the Spring Mountains National Recreation Area (SMNRA) campground concessioner to reduce their waste disposal costs. In visitor trash collection areas the concessioner switched out at least one 3 yard trash dumpster serviced by Republic Services Inc. with a 6 yard dumpster for recyclable material serviced by Nevada Construction Clean Up, Inc. Due to the difference in the service fees of these two companies, the concessioner anticipates saving $5,600 per year.

Strategically located recycling containers require:
• Space to place a 6 yard dumpster in proximity to a trash dumpster. The proximity of these dumpsters is crucial to reducing contamination of recycling dumpsters.
• Signage on the dumpster and/or in the surrounding area to differentiate the recycling dumpster from the trash dumpster.
• A contract with a recycling service provider to empty the dumpsters on a scheduled basis.

Price estimates for a dumpster recycling container operation were obtained from Nevada Construction Clean Up, Inc. (NVCCU), the company selected by the SMNRA campground concessioner. NVCCU would charge the following flat fee each time they empty a 6 yard dumpster they provide:

• Interagency Office - $35
• Red Rock Canyon campground and visitor center - $50
• Lake Mead National Recreation (HQ, Warehouse and Boulder Beach district locations) - $50
• Desert National Wildlife Refuge Corn Creek Field Station - $50

**Centralized collection point operations** involve placing 65 and/or 95 gallon containers with liners near the trash cans in visitor use areas. Materials in the containers would then be transported to a centralized collection point with a 30 yard roll-off dumpster into which both internally and externally recycled materials would be placed.

Centralized collection point operations require:

• Manpower to move the recyclable materials from the containers to the centralized dumpster. This may require revising existing trash collection contracts, adding to employee tasks or developing a volunteer corps. While the volunteer corps provides unpaid labor, they will require vehicles in which to transport the materials and overall program supervision.
• The purchase of 65 and/or 95 gallon containers and liners. (Note: Red Rock Canyon National Conservation Area already owns containers that could be used. The NPS has containers in place at the Visitor Center but would need to make additional purchases for other areas.)
• The purchase or rental of roll-off dumpsters. Two dumpsters would need to be purchased for each centralized location to make the servicing of the dumpsters cost effective. This enables the service provider to drop off an empty dumpster when picking up a full one.
• A contract with a recycling service provider to empty the roll-offs on an on-call basis.

A request for information on price estimates to pick up a full 30 cubic yard roll-off and replace it with an empty one on an on-call basis was sent to all trash providers that service Clark County by Zia Engineering and Environmental Consultants. Price quotes from 3 companies were obtained:

<table>
<thead>
<tr>
<th>Location</th>
<th>Auburn Fibers</th>
<th>Secured Fibers</th>
<th>Evergreen Recycling*</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPS Warehouse</td>
<td>$100</td>
<td>$125</td>
<td>$525</td>
</tr>
<tr>
<td>SMNRA</td>
<td>$250</td>
<td>$175</td>
<td>$525 – Kyle Canyon</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$750 – Lee Canyon</td>
</tr>
<tr>
<td>RRCNCA</td>
<td>$200</td>
<td>$125</td>
<td>$315</td>
</tr>
<tr>
<td>DNWR</td>
<td>$275</td>
<td>$250</td>
<td>$750</td>
</tr>
</tbody>
</table>
*The Evergreen Recycling estimate includes the price of roll off rental.

Additional costs for centralized collection point operations include the purchase or rental of containers. The following price information was obtained:

<table>
<thead>
<tr>
<th>Type of Container</th>
<th>Auburn Fibers Rental/month</th>
<th>Secured Fibers Rental/month</th>
<th>Purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 and 95 gallon containers</td>
<td>n/a</td>
<td>n/a</td>
<td>$50 each</td>
</tr>
<tr>
<td>30 cubic yard roll offs</td>
<td>$130</td>
<td>$175</td>
<td>$5000 each</td>
</tr>
</tbody>
</table>

**Full service recycling contracts** are the third option the team examined. Each of the contractors that responded to the request for information (Auburn Fibers, Secured Fibers, Evergreen Recycling) provide multiple levels of service. Nevada Construction Clean Up can also provide tailored services. A full service recycling contract would involve paying the contractor to manage all of the recycling needs identified by the agency. Employees of the contracted company could set out and maintain all collection containers, gather recyclable materials from all recycling locations (both outdoors and inside) and transport the materials to the contractor’s recycling station. The contractor could also be responsible for all signage needed to make the recycling program successful.

Full service recycling contracts require:

- An agency representative to manage and oversee the contract.
- Funds to pay the contractor. Prices for services beyond pick up and drop off of containers can accrue quickly. A representative from Nevada Construction Clean Up, Inc. indicated such services could be cost prohibitive for the agencies.

Price estimates were not obtained for full service recycling by the Take Pride in America in Southern Nevada Litter and Desert Dumping Team. Contracting officers and facility/managers for each agency must be involved in this process since full service recycling contracts have the potential to impact current waste disposal contracts and practices. The team members cannot decide how recycling is to be implemented at the proposed locations because they do not hold line authority in this area. Thus, it seemed imprudent to ask for price estimates on services for which the agency may not ever end up developing a contract.

**CONCLUSIONS**

Based on a review of the various options for recycling, the Take Pride in America in Southern Nevada Litter and Desert Dumping Team drew the following conclusions:

- The various options for external recycling can be combined in a multitude of ways. Since it is unlikely that one option will work for every site, each agency needs to determine the type of program to implement.
- Contracting officers and facility/operations managers must be involved in this decision making process since there will be contracting constraints and manpower issues to consider.
- While none of the current members of the Take Pride in America in Southern Nevada Litter and Desert Dumping Team have the line authority to implement an agency recycling plan, they can provide background information and vendor contact information to those that hold that authority.
Additionally the team could facilitate collaboration in areas where the implementation plans of the agencies overlap.

- Work priorities would need to be shifted at some level in the following programs:
  - SNAP Conservation Education Team
  - Anti-Litter and Desert Dumping Team
  - Contracting staff
  - Maintenance staff
APPENDIX A

STRATEGIC PLAN FOR GREENING THE DEPARTMENT OF THE INTERIOR THROUGH WASTE PREVENTION, RECYCLING AND FEDERAL ACQUISITION
VISION
The Department of the Interior’s mission is to protect and provide access to our Nation’s natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to Island communities. The Department will be an innovative leader in “greening” the Federal government by actively and systematically protecting the natural processes that sustain life on Earth. To fulfill this vision, Interior will, in its own operations, minimize solid waste, prevent pollution, save energy and other resources, reduce greenhouse gas emissions, and encourage public support and participation.

EXECUTIVE SUMMARY
This Strategic Plan outlines goals, implementing strategies, and management controls to satisfy the requirements of Executive Order 13101, “Greening the Government Through Waste Prevention, Recycling and Federal Acquisition,” and to further and focus efforts to make DOI facilities more sustainable (both in design and operation). The goals establish DOI targets for diversion of waste through recycling at 40%, 45%, and 50% for the years 2000, 2005, and 2010. Goals for green purchasing and property management focus on the use of nine recycled content, environmentally preferable, and/or biobased products in all DOI facilities, which will be tracked as indicators of broader program adoption. Strategies are outlined to institute policies and practices which will promote the incorporation of environmental considerations into all levels of procurement, from credit card purchasing to large acquisitions. Other strategies approach this issue through facility and property management activities. Implementation is overseen by the Interior Management Council and Interior’s Agency Environmental Executive, as supported by an interbureau workgroup.

PURPOSE
The Strategic Plan for Greening the Department of the Interior (Strategic Plan) provides a vision and road map for future waste prevention, recycling, and federal acquisition across DOI, as required by Executive Order (EO) 13101 - “Greening the Government Through Waste Prevention, Recycling and Federal Acquisition” and Section 6002 entitled “Federal Procurement” of the Resource Conservation and Recovery Act (RCRA).

While this Strategic Plan addresses the requirements of EO 13101, there are additional EOs related to Greening the Government including Executive Order 13123, “Greening the Government Through Energy Efficient Management.” Environmental leadership and transportation are topics of draft EOs under consideration. The Department and bureaus intend to continue to work together to synthesize goals and implement strategies for these additional requirements into a single, comprehensive Strategic Plan for Greening the Department of the Interior.

BACKGROUND
Scope
The scope of EO 13101 includes waste prevention, recycling, and “green” procurement activities at federal facilities. The EO directs federal agencies to enhance recycling activities and give preference in purchasing recycled content products (RCPs), environmentally preferable products (EPPs), and biobased content products (BCPs). Through implementation of EO 13101, DOI will continue to be a leader in the area of sustainability.
Building on Accomplishments
Over the past three decades, DOI bureaus have established successful waste prevention and recycling programs and projects, and green acquisition initiatives around the country. The bureaus continue to take steps to prevent pollution and promote the acquisition and use of environmentally preferable products and services in their activities. These projects, often which are undertaken through partnerships with other agencies, state and local governments, and non-governmental organizations, have contributed significantly to DOI greening efforts and have brought the Department and its employees much recognition.

While our efforts to fulfill executive environmental mandates have been significant, we can and must do more. DOI manages and operates hundreds of facilities that provide significant venues for promoting and showcasing the government's commitment to incorporating waste prevention and recycling in its daily operations and use of products made from recovered materials or with less adverse impact on the environment. Furthermore, these efforts help educate the public and foster understanding of and support for these initiatives in our broader society. This educational component connects well with the overall DOI mission of protecting our Nation's natural and cultural resources, and interpreting the significance of those resources for all Americans.

Through its commitment to the vision, goals, and implementation strategies of this Strategic Plan, DOI will not only meet, but surpass the goals and requirements of EO 13101. By doing this, the Department of the Interior will demonstrate that it is the premier environmental and conservation agency within the government.

Opportunities
Each product and service purchased by DOI is a discrete opportunity to move toward more environmentally-sensitive and sustainable facility design and operations. Across DOI, nearly $500 million was spent in fiscal year 1999 on the procurement of supplies, equipment, and facilities maintenance. This represents approximately nine percent of the DOI operations budgets (for the land management bureaus, the amount is as much as 15 percent). The DOI budget for line-item construction (almost $500 million in fiscal year 1999) also represents opportunities for waste prevention and greater utilization of green products. The magnitude of budget in these areas (nearly $1 billion) reflects the volume and scope of activities to be influenced through implementing the strategies discussed below.

OUR GOALS
Waste Prevention and Recycling Goals
DOI will endeavor to minimize the creation of solid waste through waste prevention, and recycling. DOI is committed to creating a culture of waste awareness in all DOI employees who then are motivated to take actions to avoid the generation of waste. Waste not generated is difficult to measure, and, thus, is not included in the goals below. The Department seeks to capture associated benefits from these activities, including: reduced use of landfill space; lower landfill tipping expenses; reuse of valuable commodities; reduced energy consumption; and reduced greenhouse-gas emissions. Specifically, DOI will:

- Divert solid waste from disposal in landfills through recycling at the rate of 40% by the year 2000, 45% by year 2005, and 50% by year 2010. Individual bureau facilities goals must meet applicable state requirements, summarized in Appendix B, if higher. (Note: No base year is required for diversion rate calculation, see Tracking Goals section below.)
Recycle the following commodities at all facilities unless significant barriers exist (e.g., lack of markets, cost): white paper; mixed paper/newspaper; cardboard; aluminum; plastic (#1 PET and #2 HDPE); glass; pallets; scrap metal; toner cartridges; and, consistent with applicable hazardous waste regulations, fluorescent lamps and ballasts; batteries; used oil, antifreeze, and tires.

### DOI Green Procurement and Property Management Goals

The DOI goal is to purchase products that have the highest percentage of recovered materials practicable, considering product price, availability, and performance. DOI will focus this effort particularly on products designated by the Environmental Protection Agency (EPA) in the Comprehensive Procurement Guideline (CPG), summarized in Appendix C. The DOI goal also is to purchase environmentally preferable products and biobased products.

Targeting products and services purchased routinely, DOI commits to reach one-hundred percent compliance with the following goals, and to improve by at least 30% each year until these goals are achieved (FY 2000 becomes baseline):

- Operate all DOI-managed fleet vehicles (including owned and leased) using re-refined oil, retread tires (when replacing tires), and reclaimed engine coolant. (Note: Certain vehicle types will be targeted for retread use when replacing tires as clarified in forthcoming Department guidance.)

- Utilize in the operation of all DOI facilities (including owned and leased space) recycled-content bathroom tissue, paper towels, and plastic trash bags.

- All copy paper used by DOI will contain at least 30% postconsumer material.

- At all DOI facilities, utilize copy paper, bathroom tissue, and paper towels that have been manufactured without the use of chlorine in deinking and bleaching.

- Utilize either recycled content carpet (face fiber or backing) or factory-refurbishable carpet for all new installations in DOI facilities.

- On a pilot basis, utilize biobased, biodegradable lubricating and hydraulic oils in equipment where spillage to the environment might occur (e.g., chain saws, marine outboards, lawn mowers, and snow mobiles).

### Factors Affecting Goal Achievement

There are certain factors that may affect achievement of our goals. These factors pose challenges to implementation of the program and are, therefore, appropriate to address in the implementing strategies and action plan. These factors include:

- **Resource availability**: Funding and other resources will be required for implementation activities, such as guidance-document development, website enhancement, pilot projects, and training.

- **GSA**: Assistance and cooperation from GSA will be needed to modify the current maintenance practices applied to vehicles that the Department leases through GSA, and to modify the terms of new and existing building-space leases.

- **Commercial vehicle services**: To streamline operations and as a pollution prevention strategy, many bureaus have turned to private enterprises to obtain vehicle maintenance services, rather than retain mechanics on staff. When DOI vehicles are serviced by a commercial source, it will be necessary to specify or
otherwise arrange for the use of re-refined oil and reclaimed engine coolant. The cooperation of these service providers will be critical in achieving vehicle-product goals.

- Retread tires: Departmental guidance is needed regarding which vehicle types are appropriate applications for retread tires.

- Training and Awareness: Consistent with acquisition streamlining, more than twenty-thousand credit cards have been issued to DOI purchasers. Achieving the DOI goals for purchasing green products will require comprehensive initiatives to orient credit-card users to these purchasing preferences and provide resources to help them find the preferable products. It is also particularly important to address misperceptions about recycled-content and environmentally-preferable products that may be based on experiences with products early in their development before adequate quality and performance levels were attained.

- Lack of product availability, timely delivery, unreasonable pricing, and poor performance: These are factors external to DOI that may limit DOI's ability to meet established goals.

- Contracting cycles. Where possible, DOI will approach its contractors and concessioners who operate under existing contracts and request that appropriate modifications be made. This may not always be possible or successful. As these contracts expire, clauses will be added to these contracts, consistent with this Strategic Plan and the mandates of EO 13101.

Tracking Progress to Meet Waste Prevention and Recycling Goals
The Agency Environmental Executive (AEE) will track progress made by bureaus toward the achievement of established goals. A Departmental memorandum from the Office of Environmental Policy and Compliance (OEPC) will be sent to bureau heads at the beginning of each fiscal year outlining how tracking data will be collected. A second memorandum will be sent at the end of the fiscal year calling for annual reporting. The OEPC website will be enhanced to allow field sites to report their data more easily via the Internet.

| Materials Recovered Through Recycling (tons) | Total Waste (landfilled, incinerated, recycled, composted) |
|---------------------------------------------|____________________________________________________|

Tracking Efforts to Achieve Green Procurement and Property Management Goals
The Office of Acquisition and Property Management (PAM), in cooperation with the Property Management Partnership Group and the Acquisition Management Partnership Group, will develop for FY2000 (revise annually thereafter) and promulgate a survey tool to gather information annually from all bureau facilities. PAM will request that bureaus provide survey data at the end of the fiscal year to determine compliance with the green procurement goals, including: vehicle-related goals (re-refined oil, retread tires, and reclaimed engine coolant); facilities-operations-related goals (bathroom tissue, paper towels, trash bags, copy paper, carpeting, and biobased lubricating oil); and any other purchases of CPG products, EPP, or BP.

Survey data will be validated by information obtained from vendor sources and through the bureau environmental auditing programs. General Services Administration (GSA) and the Government Printing Office (GPO) will be contacted for information regarding paper purchasing. The Defense Logistics Agency will report on
the DOI purchases of re-refined oil. The auditing program is discussed further below.

Bureau Goals
Bureaus are encouraged to augment the DOI goals by adopting additional, more-ambitious goals than those contained in this Strategic Plan.

Future Goal Development
The Strategic Plan will be updated periodically when it is appropriate to set new goals due to advances in product performance, improved product pricing, and/or as tracking/reporting systems improve and make it easier to track purchasing (e.g., via credit-card statements).

IMPLEMENTATION STRATEGIES AND ACTION PLAN

The seventeen implementation strategies outlined below frame a coherent program that will lead DOI to further the vision and achieve the Waste Prevention and Recycling Goals and the Green Procurement and Property Management Goals of this Strategic Plan. These strategies are consistent with the executive directives in EO 13101.

With oversight and support from the Interior Management Council, the Greening the Interior Partnership Group shall produce an Action Plan for Greening the Department of the Interior for the purpose of planning and coordinating specific activities that expand upon these identified strategies. The Action Plan will be updated annually.

Waste Prevention and Recycling Strategies

1. Develop bureau and facility Waste Prevention and Recycling Programs. (per Section 705(a)(1) in EO 13101)

2. Designate bureau and facility Waste Prevention and Recycling Coordinators. (per Section 705(a)(2) in EO 13101)

3. Initiate cooperative efforts to recycle among bureau facilities and with other State and local entities within geographical clusters. (per Section 705(b) in EO 13101)

4. Allocate to waste prevention and green procurement projects the revenues generated by recycling managed by the General Services Administration, in accordance with Part 3 of the Departmental Manual (515 DM3).

Green Procurement and Property Management Strategies

5. Develop policy and guidance on the consideration of environmental factors in acquisition planning. (per Section 401 in EO 13101)

6. Update the DOI’s Affirmative Procurement Program policy, and develop bureau Affirmative Procurement Programs and activities. (per Section 402 in EO 13101)

7. Develop model contract language for services and goods routinely used throughout the Department which incorporate and specify waste prevention and green procurement.

8. Target projected contracts over $100,000 for incorporation of revised language to implement waste prevention and green procurement. (per Section 501 in EO 13101)

9. Develop and disseminate green procurement training materials. (per Section 801 in EO 13101)

10. Partner with procurement sources to ensure the products that are sold to DOI comply with RCRA and EO 13101, and support DOI goals.
11. Execute pilot projects to evaluate products for efficacy, environmental benefits, and cost of use.
   (per Section 503(b) in EO 13101)

**General Program Strategies**

12. Establish goal tracking and auditing protocols.

13. Establish benchmarks for recognition of facilities showing leadership in DOI by comprehensive adoption of these initiatives.

14. Develop model facilities within each bureau, including the Main Interior Building (MIB), which exemplify sustainable design principles and utilize green construction products.
   (per Section 704 in EO 13101)

15. Ensure that building space leased by DOI (or for DOI by GSA) incorporates sustainable design, green products and services, recycling, energy management, and water conservation in building development and operation.
   (per Section 702 in EO 13101)

16. Recognize outstanding efforts within the Department to promote mandates of EO 13101.
   (per Section 802 in EO 13101)

17. Host “Greening the Interior” workshops to further discourse and understanding of sustainability as it applies to DOI operations.

**MANAGEMENT CONTROLS**

The Strategic Plan and implementation Action Plan will be realized through the dedication of staff and resources to undertake, coordinate, oversee, track, and report on these efforts.

**Interior Management Council**

The Interior Management Council (IMC) will track implementation of the Strategic Plan in all bureaus, in conjunction with the Agency Environmental Executive.

**Budget Guidance**

The Department’s guidance for submission of bureau budgets and five-year budget plans will be amended to instruct bureaus to indicate what funding needs exist to support the activities of this Strategic Plan.

**Greening the Interior Partnership Group**

The Greening the Interior Partnership Group, an intra-bureau group, will coordinate the development and execution of a two-year Action Plan. The Partnership Group will consist of representatives having expertise in property, procurement, facility management, environmental management, and legal affairs. The Director of the Office of Acquisition and Property Management and the Director of the Office of Environmental Policy and Compliance will oversee this group. Following approval of this Strategic Plan, the Greening the Interior Partnership Group will develop a charter for IMC approval; this charter will direct the Partnership Group to expand this Strategic Plan to encompass additional Greening the Government initiatives and goals.

The Greening the Interior Partnership Group will work with the Acquisition Management Partnership Group and the Property Management Partnership Group. These Partnership Groups are professional organizations made up of Departmental (Office of Acquisition and Property Management) and bureau officials responsible for the management of acquisition systems and of real, personal, and museum property.

**Environmental Audit Program**

Bureau environmental auditing programs developed pursuant to Departmental Manual Part 515 Chapter 2 (515 DM 2) will develop protocols to evaluate DOI facilities.
for compliance with Section 6002 of RCRA and for consistency with the Department and bureau goals for recycled-content purchasing, environmentally preferable purchasing, biobased product utilization, and waste prevention. Auditing will particularly focus on recycled content products that EPA has chosen for emphasize in its federal facility enforcement program.

**Department and Bureau GPRA Plans**
The Department will highlight the Strategic Plan goals in the Department Government Performance and Results Act (GPRA) Strategic Plan.

**Reporting to the Federal Environmental Executive**
The Department’s Agency Environmental Executive will report annually to the Federal Environmental Executive on progress made in implementation of EO 13101 and toward attainment of goals. The Federal Environmental Executive will report biannually to Congress on the progress made by federal agencies.

**AUTHORITIES AND GUIDANCE**

In the Resource Conservation and Recovery Act, agencies that purchase products designated by the U.S. Environmental Protection Agency (EPA) are directed to procure such items composed of the highest percentage of recovered materials practicable (unless a decision to not do so is based on a determination that the product is not available within a reasonable period of time, or that the product fails to meet applicable performance standards, or that the product is only available at an unreasonable price).

Under EO 13101, agencies are encouraged to consider purchasing environmentally preferable and biobased products. In addition, Executive Order 13134, “Developing and Promoting Biobased Products and Bioenergy,” also encourages agencies to procure biobased products designated by the U.S. Department of Agriculture (USDA). The citations for the applicable statute, codifying regulations, and guidance follow:

- “Strategic Plan to Implement Executive Order 13101, Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition.” White House Task Force on Recycling, March 13, 1999
- “Final Guidance for Environmentally Preferable Purchasing,” August 20, 1999 (Appendix D summarizes the Guiding Principles and EPP product attributes)
- “Procedures for Submission of Biobased Products for Listing by USDA,” August 13, 1999 (Appendix E lists the proposed product categories)

**APENDICES**

Appendix A: Definitions
Appendix B: Summary of State Waste Diversion Requirements
Appendix C: Recovered Material Content Products Designated by EPA within the Comprehensive Procurement Guideline
Appendix D: Summary of EPA's Guiding Principles For Environmentally Preferable Purchasing and EPP Product Attributes

Appendix E: USDA's Proposed List of Biobased Product Categories

APPROVALS

Deputy Chief of Staff

Assistant Secretary, Policy, Management and Budget

CONCURRENCES

Office of Environmental Policy and Compliance

Office of Acquisition and Property Management

National Business Center

Assistant Secretary, Indian Affairs

Assistant Secretary, Lands and Minerals Management

ACTING Assistant Secretary, Minerals Management Service

Assistant Secretary, Office of Surface Mining Reclamation and Enforcement

Strategic Plan for Greening the Department of the Interior
Through Waste Prevention, Recycling and Federal Acquisition
Strategic Plan for Greening the Department of the Interior
Through Waste Prevention, Recycling and Federal Acquisition
Forest Service Sustainable Operations

What is a Green Team?

A green team is a group of employees, regardless of discipline or organizational level that facilitates the pragmatic implementation of sustainable operations principles on their work site. In the Forest Service, green teams range from the informal – a few employees working together to increase recycling opportunities for themselves and their community, to the formal – a group specifically chartered by leadership to promote and foster sustainable operations that reduce the unit’s environmental footprint. Successful green teams are very “local or place-based,” and the issues they choose to work on are meaningful to their specific business unit, organization, community and/or geographic location. What is sustainable in one location may be very different in another location because the natural resources, culture, economic situations, and/or opportunities are all different. Many green teams begin as an internal effort and they often grow to include members of the local community or other state, federal, or local agencies so that sustainable operations efforts can become successful on a larger scale (facility-wide, community, or an ecosystem).

Most green teams choose to work across many environmental footprint areas (water conservation, energy conservation/renewable energy, waste prevention/recycling, green purchasing, fleet/transportation, sustainable leadership). However, some green teams have been created with membership across geographic units to specifically foster dialog about the sustainable operations opportunities within a particular topic area such as recreation or energy management. We have a cadre of champions to share information and ideas, and resource materials are available to assist in starting a green team in your location.

The Forest Service currently has 31 active green teams, but this number is growing all the time. Below is a current list of active teams:

- R1, R2, R3, R4, BLM, EPA, RMRS Sustainable Operations Board of Directors
- Region 1 – Northern Region
  - Northern Regional Office
- Region 2 – Rocky Mountain Region
  - Rocky Mountain Region Regional Office
  - Rocky Mountain Region Energy Management Team (USFS, BLM, NREL)
- Greater Yellowstone Coordinating Committee – Sustainable Operations Subcommittee
- Multi-Regional Green Purchasing Team
- Bighorn National Forest
- Medicine Bow Routt National Forest
- Nebraska National Forest – Bessey Nursery
- San Juan Public Lands Unit (BLM/USFS)
- Pagosa Ranger District
- Pikes Peak Ranger District
- Sustainable Ops and Recreation
- Region 4 – Intermountain Region
  - Intermountain Regional Office
- Region 5
  - Lassen National Forest
- Region 6 – Pacific Northwest Region
  - Region 6 Sustainability Board
  - Mt. Hood National Forest
  - Siuslaw national Forest
  - Willamette National Forest
- Region 9 – Eastern Region
  - Region 9 Sustainability Board
  - Chippewa National Forest
  - Green Mountain National Forest
  - Superior National Forest
- Region 10 – Alaska Region
  - Tongass National Forest
- Northeastern Area / Northern Research Station
- Pacific Southwest Research Station
- Rocky Mountain Research Station
- Pacific Northwest Station
- International Institute of Tropical Forestry
- International Forestry
- Washington Office Headquarters

**Green Team Activities**

The activities our green teams work on depend on their priorities and opportunities. Activities range from encouraging people to turn off lights and switch off PC monitors to measuring paper use and seeing if it can be reduced over a time period to conducting on-site energy audits. It could also mean setting out a recycling box and having the team empty it, encouraging people to bring in mugs instead of using plastic cups or organizing bulk buying of compact fluorescent light bulbs for people to use at home. There is tremendous opportunity to make a difference!

**A Few Forest Service Green Team Success Stories**
The Pike-San Isabel National Forest Pikes Peak Ranger District’s Green Team led the district’s reduction of water use by 22 percent, electricity use by 7 percent and its natural gas use by 26 percent.

The Greater Yellowstone Sustainable Operations Subcommittee was established to work towards implementing sustainable operations efforts across 14 million acres of public land in the Greater Yellowstone Ecosystem. Six National Forests, two National Parks and two U.S. Fish and Wildlife management units are represented on this committee. Initial areas of focus include expansion of propane cylinder recycling, fleet sharing and shared green purchasing.

The headquarters of the International Institute of Tropical Forestry in Puerto Rico is a historic building which is being restored and upgraded to achieve LEED certification. LEED is a certification program for buildings which achieve significant reductions in energy, water and other resource consumption as compared to standard building practices. The headquarters will be the first LEED-certified building in Puerto Rico.

The Pacific Southwest Research Station’s Center for Urban Forest Research has been testing and demonstrating a “sustainable garden” since 1999. This 1,000-square-foot garden is located outside the Center’s entrance on land that was once a parking lot. The garden employs a variety of mechanisms that reduce water use and energy use and encourages the design of environmentally-friendly landscaping.

Region 5 and the Pacific Southwest Research Station established a “green” microgrant program. The station funded seven microgrants, each at a maximum of $2,000. Region 5 funded 13 microgrants, each at a maximum of $1,500. Green microgrants are fairly modest Forest Service funds that are awarded to stimulate grassroots sustainable efforts on the ground. The microgrant approach enables Forest Service employees to decide which sustainable activities are needed most at their unit and apply for funding for those activities.

Six Rivers National Forest recycles paper, cardboard, aluminum, plastic, glass, toner cartridges, and batteries at all of its ranger districts and the supervisor’s office. At the Smith River NRA Visitor Center, paper that has been printed on one side is cut to tablet size and the good side is used to take memos at the front desk.

Grey Towers National Historic Landmark negotiated an agreement with the U.S. Park Service to retain a Ford Thinkmobile on loan. The Thinkmobile is an electric four-passenger vehicle with no tailpipe emissions.

The International Forestry Green Team hosted a Sustainable Operations/Ecosystem Services Cap and Trade Game as a way for Forest Services employees to think about the types of activities they could implement to reduce their unit’s environmental footprint including biomass, energy, biofuels, etc.

Several teams have produced reports describing environmental footprint on a regional and local level. These include Region 2, Region 5 and the Pacific Southwest and the Pacific Northwest Research Stations. These reports have provided a guidepost for the
development of the national environmental footprint. A national environmental footprint report for the Forest Service was just released on September 20, 2007.

✧ **Washington Office Headquarters Team** installed a solar trash compactor at the southwest corner of its building. This is a high use/high trash collection area and the compactor is yielding significant collection savings as well as a plastics recycling opportunity. The team also purchased two additional compactors for USDA installation and use.
## WASHINGTON OFFICE GREEN TEAM INITIAL CHALLENGE

<table>
<thead>
<tr>
<th>Footprint Area</th>
<th>Goals/ActionsYou Can Take</th>
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<tbody>
<tr>
<td>Energy Conservation</td>
<td><strong>Goal 1. Reduce energy use by 5 percent in the Washington Office for FY 08.</strong>  &lt;br&gt; • Turn off lights when not needed  &lt;br&gt; • Turn off computer, monitor, and printer at the end of the day  &lt;br&gt; • Minimize use of personal appliances; use communal coffee pots, refrigerators, and printers</td>
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<td>Recycling</td>
<td><strong>Goal 2. Recycle 100 percent of the collectable waste products in Washington Office.</strong>  &lt;br&gt; • Recycle paper, cardboard, bottles, cans, and printer/toner cartridges, as collected in office building  &lt;br&gt; • Use duplex printing; set as the default on your computer and printer  &lt;br&gt; • Use 100-percent recycled copy paper</td>
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<tr>
<td>Green Purchasing</td>
<td><strong>Goal 3. Purchase sustainable products for the Washington Office.</strong>  &lt;br&gt; • Purchase 100-percent recycled copy paper  &lt;br&gt; • Purchase environmentally friendly cleaning products  &lt;br&gt; • Look for “green options” when purchasing office supplies</td>
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<td>Leadership</td>
<td><strong>Goal 4. Foster an office environment that encourages and rewards creativity and innovation for sustainable operations.</strong>  &lt;br&gt; • Become a member of the WO Green Team.  &lt;br&gt; • Promote “green ideas” in the WO.  &lt;br&gt; • Reward “green initiatives” in the WO.</td>
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1. SOLAR GARBAGE COMPACTOR (BIG BELLY) - Done
   - Installed 1 in Yates Building
   - Provided 2 for USDA Whitten & South Buildings.

2. EXPAND RECYCLING – In Progress
   - Partnering with USDA - more containers, expanding collectables, weighing results
   - Relabeling containers to update what can be collected
   - Promoting recycling in WO Green Challenge

3. COMPUTERS / PRINTERS / COPYING – In Progress
   - Consulting with IRM on the possibility of setting the default for printers/copiers
to duplex printing.
   - Promoting better energy use through WO Green Challenge

4. 100% RECYCLED PAPER – Done, Ongoing
   - Copy paper will be 100% recycled starting FY08

5. COMMUNICATION/ AWARENESS CAMPAIGN – In Progress
   - FS Wiki-Site – WO Green Team information
   - WO Green Team Charter
   - WO Green Team banner for identification
   - Creating a communication forum with staff representatives on WO Green Team

6. WO GREEN TEAM CHALLENGE – In Progress
   - Roll out at / WODG September 24, 2007
   - Kick-off at WO Green Team meeting October 3, 2007

7. SUSTAINABILITY OPERATIONS SUMMIT – In Progress
   - Developing a Booth
   - Sharing WO Green Team Challenge/ Energy Survey results

8. USDA BENEFICIAL LANDSCAPING PROJECT – In Progress
   - Partnership with USDA documented in an MOU
   - Providing landscape architect to lead the effort
   - Providing additional expertise on the team such as botanical/ horticultural