

United States Department of Agriculture

Forest Service

Pacific Northwest Region

Conservation Education Capacity and Needs Assessment

Umpqua National Forest

July 11, 2006, Emily Molter



Alan Baumann with students participating in the Alder Creek Children's Forest.

Executive Summary:

For the Forest Service to build a strong future generation of natural resource stewards and leaders and have an informed citizenry for sustainable resource management, it must enhance its educational programs to the people it serves. This assessment determines the existing conservation education opportunities for youth in Douglas County based on information gathered from educators and students and to provide recommendations to the Forest Service concerning future direction for the program.

Based upon analysis of the gathered information, recommendations have been made for implementing more conservation education (page 14). Recommendations include identifying a Conservation Education Liaison, promoting the STEP and SCEP, recruiting student volunteers, providing resources to schools, gaining employee buy-in, and providing technical, hands-on training to students.

As of March 16, 2006, there are 74 environmental educational opportunities available to Douglas County students, teachers, and the general public (Refer to Appendix C on page 23 and Appendix D on page 36 for more detailed information). There are 45 programs, camps, and other activities available to elementary school students that get them involved in outdoor learning. There are 33 outdoor programs, 8 programs that offer technical learning such as data collection, research, or technology, and 2 internship programs available to middle school students. Many of the programs available to high school students lack information about job-related skills and job-related internships or opportunities. Data collection is an exception to this observation because 25 programs offer some form of data collection.

Forestry, wildlife, and fisheries are the top three natural-resource-related topics taught in the Douglas County schools. Outdoor education and guest speakers are the top two preferred methods of providing more conservation education to students. Seventy-nine percent of the educators surveyed stated that there is no information about STEP and SCEP available to students in their school. Each educator offered a different opinion on how they would like the Forest Service to be more actively involved in their school, but the main theme is that they all want the agency to be involved in some way.

Fifty-five percent of students are familiar with the term natural resources; however, 50% of the students surveyed do not have a strong interest in natural resources or future careers with natural resource based agencies. Wildlife management and forestry are the two natural-resource-related topics where students expressed an interest. An effective way to inform students about possible internship or career opportunities with the Forest Service or other land management agencies is to hold an assembly or job/internship fair. Another way is to have guest speakers present information to the schools. Science, P.E., Sports, Math, and English are the student majority's favorite classes in school. Photography, Home Economics, other Foreign Languages, Advanced Agricultural Mechanics, and Advanced Art are the top classes that students wish were offered at their school.

Although many educational opportunities are currently available to students and teachers, there is a disconnect from the schools and the natural resource agencies. Students and educators are not aware of all the resources available to them or do not have all the resources needed to implement more conservation education. At the same time, agencies are providing education within a limited budget and limited personnel.

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Purpose:

The purpose of this assessment is to determine the current conservation education efforts in Douglas County and to determine what is missing in education or curriculum that the stakeholders would like to see implemented into a new education framework provided by the Umpqua National Forest. The assessment is part of a larger conservation education project in conjunction with the USDA Forest Service and AmeriCorps*VISTA. The ultimate goal of the project is to work with Douglas County schools to develop strategies to interest students in, and increase awareness about, careers in natural resource management and the sciences. By providing hands-on learning experiences for at-risk youth from families in the lower income ranges, it is anticipated that the youth are more likely to become interested in careers in the sciences and will be motivated to finish high school and continue on to college.

The scope of this assessment is limited to only Douglas County schools because the Douglas County AmeriCorps*VISTA team is the responsible entity for the project. The Douglas County AmeriCorps*VISTA team is the first in Oregon to be based on a particular county, rather than on a common theme of work. Most teams are spread out across the state, and focus on a common cause, such as child abuse or hunger issues. The Douglas County team members work with a broad range of agencies, addressing issues from safe after-school programs to college access, from food self-sufficiency to micro-enterprise business skills. Team members work to recognize and understand the inter-related causes of poverty, and thus the necessity of working across agencies to alleviate poverty. Based in one region, members meet regularly as a team and use a common identity as VISTA volunteers to increase collaborative efforts between their organizations and across the community as a whole. The Umpqua National Forest's Cottage Grove Ranger District is located in Lane County, so the Lane County schools were not surveyed or analyzed because of the constraints of the Douglas County AmeriCorps*VISTA team.

Assessments are particularly important for identifying and measuring the magnitude of capacity gaps. A situation assessment determines "where we are now" to place parameters around the envisioned initiative so it can be further developed. In order to make a conservation education framework that encompasses all possible educational opportunities for Douglas County youth, a situation assessment needs to be measured to determine the capacity gaps and the interests of stakeholders.

This assessment is a blend of several different types of assessments. It has components of a Capacity Assessment, Management/Accountability Framework Assessment (Stakeholders), and a Mission and Strategy Assessment. This assessment does not need all of the components of each separate assessment in order to make a proper analysis. Instead, it will infuse parts of different assessments to make a broader, overall assessment of the conservation education efforts.

Conservation Education Defined:

Conservation education needs to be defined to ensure a clear understanding of the subject of this assessment. Conservation education is environmental education that helps ensure the environmental literacy of youth from pre-kindergarten through 12th grade, and their educators through formal and non-formal educational methods, in concert with its partners in order to protect and enhance the Nation's natural resource base and environment. The definition comes from the North American Association for Environmental Education (NAAEE). NAAEE defines environmental education as *a process which promotes the analysis and understanding of environmental issues and questions as the basis for effective education, problem-solving, policy-*

making and management. The purpose of environmental education is to promote the education of skilled individuals able to understand environmental problems and possessing the expertise to devise effective solutions to them. In the broader context, environmental education's purpose is to assist in the development of a citizenry conscious of the scope and complexity of current and emerging environmental problems and supportive of solutions and policies which are ecologically sound (NAAEE Constitution, 2006). The Forest Service describes conservation as "protecting and enhancing the Nation's natural resource base and environment" (USDA Strategic Plan, Goal 5). (Refer to Appendix A on page 19 for a list of objectives within the scope and perspective of Forest Service conservation education necessary for developing an environmentally literate and culturally sensitive citizenry.)

Capacity Assessment Defined:

According to the Bureau for Development Policy, capacity is defined as "the ability of individuals and organizations or organizational units to perform functions effectively, efficiently, and sustainably." The capacity approach stresses the issues of capacity and sustainability at various levels, in a comprehensive and integrative manner. There are three levels to consider when performing a capacity assessment. These levels are the broad system, the entity, and the individual (Bureau for Development Policy, 1998).

A system is a "regularly interacting or interdependent group of items forming a unified whole (Bureau for Development Policy, 1998)." In a systems context, capacity is where a set of entities operate toward a common purpose and according to certain rules and processes. Formal and informal organizations are included in the systems level. Many organizational entities are involved in the broader system, with one or two being defined as the key or leading organization for the defined initiative. The Umpqua National Forest and AmeriCorps*VISTA are the leading organizations for this assessment.

Stakeholders:

In this assessment, the stakeholders will be identified as well as their responsibility to the function of the proposed framework that will be created by the Umpqua National Forest. There are many stakeholders who are involved in the efforts to provide conservation education to the youth of Douglas County. A stakeholder is any entity or individual that is involved in any part of the program either directly or indirectly including the ultimate beneficiaries (Neville Turbit-Project Perfect, 1998). It is important to know which entities and individuals are interested in the success of the program because they may be affected by the program's activities and outcomes.

There are several different types of stakeholders that need to be considered when making an assessment or program. (Refer to Appendix B on page 22 to see the stakeholders for the Conservation Education Framework)

- Crucial stakeholders are critical to the success of the program.
- Significant stakeholders have a significant impact on the project and if the project does not produce a successful outcome, their role may be adversely affected.
- Interested stakeholders may be end users of the final product or have some contribution in the design of the project.
- Involved stakeholders are people who are involved on the periphery.

• Outside stakeholders are the remaining people who do not fit into any of the above categories, may be curious about the project, or may not be impacted by the outcome of the project (Neville Turbit-Project Perfect, 2005).

Mission:

An organization needs a strategy with a clearly defined mission in order to function properly. Because the Umpqua National Forest is writing the framework for conservation education efforts in Douglas County, their mission will be the focus of this assessment.

United States Forest Service Mission:

It is important to understand the mission of the Umpqua National Forest and the mission of the USDA Forest Service because they are primary stakeholders in the assessment. The conservation education mission of the United States Forest Service for 2006-2011 is to "provide science-based natural resource education and services through formal and non-formal education venues." The Forest Service provides education to pre-kindergarten through twelfth grade students and their educators so awareness, knowledge, and skills for sustaining a healthy, natural environment (Forest Service Conservation Education Plan, 2005).

In order for the Forest Service to build a strong future generation of natural resource stewards and leaders and have an informed citizenry for sustainable resource management, it must enhance its educational programs to the people it serves. The vision is that all mission areas of the Forest Service, along with their partners, contribute to the responsibility of developing an environmentally literate citizenry to uphold our Nation's forests and grasslands for future generations (Forest Service Conservation Education Plan, 2005). Seven implementation objectives are stated in the Forest Service Conservation Education Plan for 2006-2011:

In the future:

- Conservation education is valued within and outside the agency as critical to the success of the mission of the Forest Service. Participants in Forest Service conservation education activities understand ecological principles and the Forest Service mission.
- Participants in Forest Service conservation education efforts appreciate and understand the natural environment and the role humans play in sustaining the nation's forests and grasslands.
- Participants in Forest Service conservation education efforts are informed consumers and stewards of natural resources.
- The Forest Service is viewed as the place for hands-on, place-based conservation education.
- The Forest Service is the public's first stop for educational materials and knowledge on forests, grasslands, and related natural resources.
- The nation's forests and grasslands are less vulnerable to catastrophic fire, are minimally affected by invasive species, are less fragmented, and are used appropriately by off-highway vehicles; in part due to Forest Service conservation education efforts.

• Employees have the knowledge, skills, abilities and resources to effectively play their part in delivering conservation education programs.

Goals of the Mission:

There are three goals the Forest Service plans to use to foster environmental literacy.

- 1. Use Forest Service science and services to foster informed decision-making and develop environmentally literate citizenry.
- 2. Foster the value of Conservation Education within the Agency.
- 3. Increase Forest Service capability to develop and deliver high-quality science-based conservation education.

The strategies the Forest Service will use to reach their goals are stated below:

- Provide opportunities for students to learn.
- Provide opportunities for educators to learn.
- Improve public access to Forest Service resources and information
- Develop communication strategies and tools to demonstrate to line officers the value of conservation education to accomplishment of their priorities.
- Increase Forest Service employees' ability to provide exceptional conservation education opportunities.

Umpqua National Forest Mission

The Umpqua National Forest's mission is to:

- Promote ecosystem health, including protection for species and natural systems
- Multiple benefits to people, including provisions for diverse human uses, both commercial and personal
- Develop the best scientific information available to deliver technical and community assistance
- Deliver effective public service

The March 2004 strategic plan for the Umpqua National Forest has conservation education as part of its vision for the future. A long term goal is to be responsive to stakeholders and attract more partnerships and volunteers. For the 2004-2005 fiscal year, an administrative benchmark for public outreach and partnerships involves a public outreach strategy including environmental education. A second strategy is to inventory existing and potential partnerships (Umpqua National Forest Strategy, 2004).

For the 2006-2008 fiscal year, an administrative benchmark of the public strategy begins in which employees adapt, adopt, or design aspects of involvement and partnerships, including environmental education. There will be on-site visits between public and partners occurring frequently to resolve issues, create energy, and share information and a diverse array of volunteer opportunities (Umpqua National Forest Strategy, 2004).

AmeriCorps*VISTA Mission:

AmeriCorps*VISTA is the second primary stakeholder in the proposed conservation education framework because of the partnership between VISTA and the Forest Service. AmeriCorps*VISTA is a program through the Corporation for National and Community Service. AmeriCorps*VISTA is devoted to eliminating poverty by helping individuals and low-income neighborhoods make affirmative changes for themselves and their community. AmeriCorps*VISTA provides full-time members to community organizations and public agencies to create and develop programs that build capacity and bring low-income individuals and communities out of poverty. "AmeriCorps*VISTA is dedicated to the proposition: that no one should go hungry in America; no one should be without a home, a good education, and a livable income (AmeriCorps website, 2005)."

The Douglas County AmeriCorps*VISTA team is the first in Oregon to be based on a particular county, rather than on a common theme of work. Most teams are spread out across the state, and focus on a common cause, such as child abuse or hunger issues. The Douglas County team members work with a broad range of agencies, addressing issues from safe after-school programs to college access, from food self-sufficiency to micro-enterprise business skills. Team members work to recognize and understand the inter-related causes of poverty, and thus the necessity of working across agencies to alleviate poverty. Based in one region, members meet regularly as a team and use a common identity as VISTA volunteers to increase collaborative efforts between their organizations and across the community as a whole. The team also acts as a support network for each member, with help finding affordable housing in the area, ongoing training opportunities, people to listen during times of frustration, friends to hang out with on the weekends, and occasional team trips just for fun.

Background:

The principal industries in Douglas County include wood products, tourism, agriculture, and fishing. There are 12 incorporated cities in the County: Canyonville, Drain, Elkton, Glendale, Myrtle Creek, Oakland, Reedsport, Riddle, Roseburg, Sutherlin, Winston, and Yoncalla (E-Government Portal, 2005). The Umpqua River is the major river that runs through the county. There are numerous watersheds that are based off of the river. The lakes, rivers, and reservoirs of Douglas County provide ample boating and fishing opportunities for people of all ages (E-Government Portal, 2005).

Douglas County is considered by some as the timber capital of the United States. It contains nearly 2.8 million acres of commercial forest lands and approximately 25% of the county's labor force is employed in the forest products industry. Another 30% of the workforce in the county owes their jobs to the necessary support services related to timber operations. Over 50% of the land area of the County is owned by the Federal Government. These lands are managed by the U.S. Forest Service and the Bureau of Land Management (E-Government Portal, 2005).

There are 13 public school districts with approximately 15,360 students according to the 2003-2004 Annual Report and 732 home-school registrations (Douglas ESD, 2004). Because many of the jobs in the county rely on the abundant natural resources, it is important for students to learn about the career and collegiate opportunities that are available to them. Also, it is critical for students to learn about the conservation of these resources in order to sustain them for future generations.

According to the US Census, Douglas County's average per capita incomes are consistently lower than the state average. In 2002,

- 13.3% of county residents lived in poverty
- 19% of children aged seventeen or younger lived in poverty. (This compares with the statewide rates of 11.3% and 15.1%, respectively.)

During the 2003-2004 school year,

- 49% of Douglas County students were eligible for the free or reduced lunch program
- 12 out of the 13 public schools reported rates of over 60%
- Glendale School District had a rate of almost 95% eligibility for the lunch program.

Douglas County has the sixth highest dropout rate in the state. In 2000, only 13.3% of people over the age of 25 had a Bachelor's degree or higher, compared with 25.1% statewide (Oregon Department of Education). Affordable education ranked highly as a service gap, with community members suggesting more scholarship programs and more assistance with daycare and transportation costs as means to assist residents to obtain higher education. Higher education is available only at the community college level in Douglas County; for four-year university degrees, people must travel outside the county.

Based on 2005 data from three programs of Umpqua Community Action Network's (UCAN) program participants,

- 4% have less than a ninth grade education
- 16.5% did not graduate high school
- 37.6% are high school graduates or have a GED
- 33% have some post secondary education
- 8.7% are graduates of a two or four year college program.

Job skills training was named as the number one service gap on UCAN's community survey (Community Needs Assessment, 2005). Since Douglas County has been so dependent on the timber industry, many residents do not have the skills necessary to obtain employment in a new field. Umpqua Training and Employment assists approximately 600 county residents every year with skills training, and 1,500 with job searching through their 1-Stop program.

Substance abuse is a rapidly worsening problem throughout the county: particularly in South County. According to the Douglas County Interagency Narcotics Team:

- Methamphetamine arrests have risen by 394% since 2001 (increasing from 101 to 499)
- Marijuana arrests rose over 730% (from 59 to 490)
- 12.8% of those arrested were juveniles
- In 2004, there were 74 charges of endangering the welfare of a minor—30 of those within 1,000 feet of a school.
- 90% of crimes in Douglas County can be tied to methamphetamine use.

The drug situation is also a major disincentive to businesses who might want to locate in the county, and local employers have had problems finding job seekers who can pass drug tests.

Methods:

The information for the capacity assessment of conservation education opportunities was gathered by online research; phone and personal interviews with various agencies, organizations, and community members; other Forest Service employees; and previous AmeriCorps*VISTA members. The information was gathered in a time frame of September 2005 through March 2006.

Analysis:

As of March 16, 2006, there are currently 74 available environmental educational opportunities available to Douglas County students, teachers, and the general public (Refer to Appendix C, Summary of Conservation Education Programs Available to Douglas County Residents on page 23 and Appendix D, Umpqua National Forest Conservation Education Efforts on page 36 for more detailed information):

- 38 outdoor classroom/activities/instructional programs
- 34 field trips/site visits
- 6 after school programs/extracurricular activities
- 8 camps
- 8 exhibits/displays
- 9 organizations offering guest speakers or presentations
- 5 internship programs
- 6 programs that offer field and restoration work
- 4 research projects
- 3 museums
- 3 interactive online activities
- 12 indoor programs available to pre K-12 students
- 6 programs available to teachers and 7 programs that offer free curriculum.
- 2 films available to the general public about the history of the Forest Service and the Oregon Dunes Natural Recreation Area.
- 3 Festivals
- 15 programs/activities and 2 training opportunities available to the general public.
- 41 programs available to elementary students
- 46 programs available to middle school students
- 42 programs available to high school students
- 11 programs available to home school students only
- 49 programs that require no costs 26 programs that do not require transportation or transportation can be reimbursed or provided by other means

There is a large quantity of programs that incorporate forestry (38 programs) aquatic ecology, watershed, and riparian (36 programs) wildlife (34 programs),

entomology/macroinvertebrates (33 programs), plant/tree identification (32 programs), fisheries (30 programs), and soils (28 programs) topics into their programs (Refer to Figure 1, Majority Topics in Conservation Education Programs). This may be due to the fact that these are part of the biggest natural resources available in Douglas County and many of the available jobs reflect these topics (Refer to Appendix E, Breakdown of Programs into Subjects, on page 40). There are 49 programs

available free of charge to their targeted audiences which is beneficial because of the lower income rate in Douglas County, especially southern Douglas County.



Capacity Assessment:

Elementary School Assessment:

There are 45 programs, camps, and other activities available to elementary school students that get them involved in outdoor learning. According to a new report published by the Office for Standards in Education, "outdoor education helps students develop their physical skills in new and challenging situations and enables them to exercise important social skills such as teamwork and leadership (Office for Standards in Education, 2004). Other benefits that outdoor educational learning offers to students are physical fitness, cultural knowledge, increased knowledge about the environment, a way to make new friends, and a break from urban living.

Today's children are losing the understanding that nature exists in their own backyards, which further disconnects them from knowledge and appreciation of the natural world. Not only does the loss of children's outdoor play and contact with the natural world negatively impact the growth and development of the whole child and their acquisition of knowledge, it also sets the stage for a continuing loss of the environment. The alternative to future generations who value nature is the continued exploitation and destruction of nature. Research is clearly substantiating that an affinity to and love of nature, along with a positive environmental ethic, grow out of children's regular contact with and play in the natural world (White, 2004).

The Forest Service's vision statement is that all mission areas of the Forest Service, along with their partners, contribute to the responsibility of developing an environmentally literate citizenry to uphold our Nation's forests and grasslands for future generations (Forest Service Conservation Education Plan, 2005). In order to have an informed citizenry, students need to learn about natural resources in a natural outdoor setting at an early age.

Middle School Assessment:

Early adolescence is an exciting and demanding time of rapid growth, enthusiasm for learning, and increasing independence, as middle school students explore both their personal identities and their relationships to others and the world. It is important that students have the opportunity to leave behind the stresses and habits of daily lives by bringing them into an unfamiliar environment, giving them the ability to develop new skills and behaviors. The skills learned and the habits acquired are transferable into the school, home life, and possible careers in the future. Using different tools also gives students a good start on activities they can do as recreation for the rest of their lives. Learning about nature and how to enjoy it responsibly, makes the students conscious and aware of their role in conserving our most valuable resources.

There are 33 outdoor programs, 8 programs that offer technical learning such as data collection, research, or technology, and 2 internship programs available to middle school students. It is especially important in Douglas County that youth develop the skills needed for careers in natural resources as well as a respect for the natural environment because natural resources is a major industry in the area. It also is important that students learn more advanced skills in technology such as computers and GPS technology because the skills required using that technology can be used in fields other than timber. Many residents in the county do not have the skills necessary to obtain employment in a new field since Douglas County has been so dependent on the timber industry. If their children start learning useful job-related skills at an earlier age, they will be more likely to get a job in a variety of fields, not just timber.

High School Assessment:

Many of the programs available to high school students are lacking in areas related to the technical aspects of job-related skills and job-related internships or opportunities. Data collection is an exception to this observation because 25 programs offer some form of data collection. Students are getting an introduction to natural resources by learning about forestry, wildlife, fisheries, etcetera, but they are less exposed to the direct skills and components of pursuing a career or college degree in natural resources. Many of the programs do not directly show what a forester or hydrologist does on a daily basis. Only 6 programs offer internships or job-shadowing.

It is important to the alleviation of poverty in Douglas County that students have the opportunity to gain work experience and work-related skills in order to sustain a family-wage job for their future. Because AmeriCorps*VISTA is a crucial stakeholder in the conservation education program the Forest Service is developing, it is important their mission of alleviating poverty is addressed directly or indirectly in the new education programs.

Needs Assessment:

Methods:

The educator information was gathered by an online survey written by Emily Molter posted online using the Douglas Education Service District's (ESD) "Survey Monkey" subscription. "Survey Monkey" is an online survey website that helps organize data, send out surveys, and track responses from participants.

The student information was gathered from Roseburg High School by Jenna Simon, a high school student intern working under the supervision of Emily Molter. Jenna took 90 surveys to

Roseburg High School and passed them out to students in her classes. The information from Phoenix School, Days Creek Charter School, Oakland High School, and Elkton High School was gathered by mailing surveys to educators and having them pass out the surveys to their students. The Glendale High School and Elementary School surveys were collected at the Glendale Regional Watershed Science Symposium. The Glide High School surveys were collected by a high school visit.

Analysis:

Educators:

There were 21 respondents out of a total of 55 respondents surveyed. The schools that this survey represents are Riddle, Roseburg, Douglas, South Umpqua, Glendale, Yoncalla, Glide, Days Creek, North Douglas, Sutherlin, Phoenix, Camas Valley, and Reedsport. (Refer to Appendix F, Educator Survey Data, on page 43).

Forestry, wildlife, and fisheries are the top three natural resource related topics that are taught in the Douglas County schools. Outdoor education and guest speakers are the top two preferred methods of providing more conservation education to students. Seventy-nine percent of the educators surveyed said that there is no information about STEP and SCEP available to students in their school. Each educator had a different opinion on how they would like the Forest Service to be more actively involved in their school, but the main theme is that they all want the agency to be involved in some way.

Students:

There are approximately 16,000 students in Douglas County. Surveys were sent out to Roseburg High School, Glendale Elementary and High School, Glide High School, Days Creek Charter School, Phoenix School, Oakland High School, Riddle Charter School, Reedsport High School, and Elkton High School. There were 254 respondents. The students surveyed ranged from grade three to twelve. The schools that this survey represents are Roseburg, Glendale, Glide, Days Creek, Phoenix, Oakland, and Elkton. (Refer to Appendix G, Student Survey Data, on page 50).

Fifty-five percent of students are familiar with the term natural resources; however, 50% of the students surveyed do not have a strong interest in natural resources or future careers with natural-resource-based agencies. Wildlife management and forestry are the two natural resource related topics where students expressed an interest. The best way to inform students about possible internship or career opportunities with the Forest Service or other land management agencies is to have an assembly or job/internship fair or have guest speakers present information to the schools. Science, P.E., Sports, Math, and English are the majority's favorite classes in school. Photography, Home Economics, other Foreign Languages, Advanced Agricultural Mechanics, and Advanced Art are the top classes that students wish were offered at their school.

Recommendations:

Based on the above information, the following recommendations are suggested for the Umpqua National Forest to consider when implementing more conservation education in the future.

1. Identify a Conservation Education Liaison

The majority of the feedback from schools during my service thus far is that a liaison from the Forest Service and other agencies is vital in communicating the conservation educational classroom opportunities as well as career or internship opportunities to students. Identifying a point of contact will facilitate interaction between students, schools, the public, and the agency. A full time employee can be hired, an existing employee can be assigned collateral duties, or a volunteer can be recruited for this position.

Hire an employee: This is the preferred method of appointing a liaison, but may not be a feasible option depending on the budget. The Roseburg District Bureau of Land Management has asked to be a partner with the Forest Service in regards to the conservation education framework that is written, so the BLM and FS can share their resources to pay the salary of the liaison (Service First). The Douglas County Education Service District Curriculum Department has agreed to partner with the Forest Service to help implement more conservation education in anyway they can. Cathy Chenail is the head of curriculum and has offered her support. The potential duties of the liaison are below and prioritized in order of importance (Refer to Appendix H on page 55 for a detailed list of duties):

1. Continue contact with school administrators, teachers, and students to keep a strong relationship between the schools and the agency.

2. Continue to update the Environmental Education Resource Directory (EERD) on a yearly basis. The EERD is a directory that lists all conservation education programs for students and teachers with the Oregon state educational standards and benchmarks that can be easily implemented into curriculum. The directory is posted on the Umpqua National Forest's website and the Douglas County Educational Service District's website. (Refer to Appendix I, Sample Page of Environmental Education Resource Directory on page 58).

3. Coordinate field trips, outdoor education activities, and other youth service projects that involve technical, hands-on field work for students. Possible avenues of conducting these educational opportunities are recruiting retired Forest Service employees as volunteers to take students on outdoor educational field trips. Thirty-seven percent of educators surveyed would like the Forest Service to implement more outdoor education that involves field studies and job shadowing.

4. Provide education and outreach to the public on issues such as the changes in Off-Highway Vehicle use in the forest, vandalism, and any other important information.5. Collaborate with other businesses and colleges to host a large student fair instead of many separate fairs.

- Assign duties to an existing employee: The Umpqua National Forest Supervisor can assign certain duties to an existing employee in regards to conservation education. The duties and specifications will have to be decided after the employee is chosen.
- *Recruit Volunteers:* The Volunteer Coordinator can recruit and train a volunteer to act as a liaison as well. It will be the responsibility of the Volunteer Coordinator to find the best candidate for this position who will be dependable, dedicated, informative, and enthusiastic about their work.

Benefits to appointing a Conservation Education Liaison include complying with the agency's vision and mission of fostering an environmentally literate citizenry, thus producing informed consumers and stewards of natural resources. A well-educated constituency is more likely to

participate in agency planning efforts, support agency projects, and participate in collaborative efforts such as stewardship project planning. Vandalism on the Umpqua National Forest might be reduced as students and the public gain a greater appreciation of their public lands. The money saved from vandalism repair can be used to enhance other projects. If the liaison works with the Volunteer Coordinator to recruit more student volunteers, the agency will be able to leverage resources in order to accomplish projects such as trail maintenance, noxious weed control, and litter patrol. A final projected benefit of having a liaison is the goal of revitalizing employee morale. When students interact with the employees and express enthusiasm, the employees will realize how important their work is to the mission of the agency.

2. Promote SCEP and STEP to High School and College Students

A representative of the Forest Service needs to provide current information about SCEP and STEP. Eighty-one percent of educators surveyed are not familiar with the programs, but one-hundred percent would like more information to give to their students. Thirty-four percent of students surveyed would like information about internships or career opportunities with the Forest Service, Bureau of Land Management, or other natural resource agencies. (Refer to Appendix H on page 55)

3. Recruit student volunteers

The Volunteer Coordinator should spend time recruiting students for the volunteer program. If students volunteer with the Forest Service, they will gain work experience and skills that can be applied to future careers. They will gain an appreciation for their public lands which will lead to reductions in vandalism and save the agency money in the future. The Volunteer Coordinator can also organize youth service projects that get youth involved in their community. (Refer to Appendix H on page 55, and Appendix J, Suggestions for Planning an Opportunities Fair, on page 75)

4. Provide needed resources to schools

Some educators do not provide as much conservation education into their curriculum as they would like because their schools are under funded and do not have the available resources. Forest Service employees can take a field day out with students and transport them in government vehicles and allow the use of field equipment such as binoculars, water quality equipment, compasses, measuring tapes, rain ponchos, field guides, GPS, etc. (Refer to Appendix H on page 55)

5. Get employee buy-in

It should be the responsibility of the Forest Leadership Team to stress the importance of conservation education for youth in Douglas County to Forest Service employees in order to get the employees interested in helping reach out to the youth. An approach to achieving this goal is giving a presentation informing the employees of the statistics and demographics of Douglas County especially the high school drop out rate and drug problem (see page 10). The presentation needs to show that this is an urgent need that cannot be overlooked. If students get involved in after school activities, are exposed to more outdoor education, and are around responsible, working professionals, the students will become more responsible themselves and continue to stay in school and say no to peer pressures. Studies have shown that outdoor education can lead to more developed teamwork and leadership skills which may be beneficial to the agency in the future when hiring new employees. (Refer to Appendix H on page 55)

6. Provide technical, hands-on training

A final recommendation is to locate employees who are willing to provide technical, hands-on training or job shadowing opportunities to middle school and high school students because job skills training was named as the number one service gap on UCAN's community survey (Community Needs Assessment 2005). Many of the available educational programs lack the technical skills needed for future careers. Thirty-seven percent of educators surveyed suggested the Forest Service provide more outdoor field studies for their students. (Refer to Appendix H on page 55)

Conclusion:

The above recommendations are suggestions based upon my personal experience of work and research in the last eight months. Although there are many educational opportunities available to students and teachers, there is a disconnect from the schools and the natural resource agencies. Students and educators are not aware of all the resources available to them or do not have all the resources needed to implement more conservation education. At the same time, agencies have the difficult task of providing education within a limited budget and limited personnel.

In order for the overall framework to be effective, the Umpqua National Forest needs supportive employees; committed volunteers; strong partnerships with other agencies, non-profit organizations, and the school districts; and a desire to want to reach out to the children they serve to ultimately bring them out of poverty. Not every student in the county will want to pursue a career in natural resources, but hopefully they will become better land stewards to their public lands.

The seven implementation objectives of the Forest Service Conservation Education Plan for 2006-2011 are listed below again as a reminder to what the United States Forest Service would like their forests to practice:

- Conservation education is valued within and outside the agency as critical to the success of the mission of the Forest Service. Participants in Forest Service conservation education activities understand ecological principles and the Forest Service mission.
- Participants in Forest Service conservation education efforts appreciate and understand the natural environment and the role humans play in sustaining the nation's forests and grasslands.
- Participants in Forest Service conservation education efforts are informed consumers and stewards of natural resources.
- The Forest Service is viewed as the place for hands-on, place-based conservation education.
- The Forest Service is the public's first stop for educational materials and knowledge on forests, grasslands, and related natural resources.
- The nation's forests and grasslands are less vulnerable to catastrophic fire, are minimally affected by invasive species, are less fragmented, and are used appropriately by off-highway vehicles; in part due to Forest Service conservation education efforts.

• Employees have the knowledge, skills, abilities and resources to effectively play their part in delivering conservation education programs.

Appendix A:

Awareness and	Basic concepts addressed by Forest Service
Knowledge	conservation education:
<i>Conservation education should provide the</i>	• The Earth comprises renewable and non-
knowledge necessary for interpreting the complex	renewable natural resources.
phenomena that shape the environment.	• Natural resources are living and nonliving,
	both of which are necessary for life.
	• Resources are affected by change in cultural.
	political, and natural climates.
	• All components of the environment function
	as a dynamic interdependent and interrelated
	system.
	• The environment has many interacting
	components, including cultural, ecological,
	economic, moral, political, social, spiritual, and
	technological.
	• The environment is the basis of our physical
	lives and economy and affects our emotional
	well-being.
	• Informed resource management encourages a
	sustainable environment and economy.
	Numerous conservation practices and
	alternatives are available for consideration in
	resource management.
	• Human health is linked to the quality of the
	environment.
	• The ability of the earth to support life as we
	know it has certain limitations.
	• The natural environment and historic sites can
	serve as places for regeneration of the human
	spirit.
Skills	Basic skills promoted by Forest Service
Conservation education should provide	conservation education include the ability to do
opportunities to gain skills necessary for informed	the following:
decisions and behavior.	• Analyze, synthesize, and evaluate
	environmental issues.
	• Use problem solving and decision-making
	skills relating to environmental issues and
	resource use.
	• Use creative and critical thinking skills to
	make conscious personal choices regarding
	natural resources.
	• Use minimum impact skills while interacting

	with the environment.
Values and Attitudes	Basic values and attitudes encouraged by
Conservation education should encourage those	Forest Service conservation education include
ethical, economic, and aesthetic values and	the following:
attitudes that, constituting the basis of individual	• We are responsible for the stewardship and
behavior, will further the sustainability of the	conservation of natural and cultural resources.
environment.	• Environmental issues transcend cultural,
	social, economic, and political boundaries.
	• Environmental issues have a moral and
	spiritual dimension.
	• Learning about the environment and our
	history is a lifelong process.
	• Humans have an important responsibility for
	maintaining the planet's biological diversity
	and cultural history.
	• Respect for and informed management of all
	resources, including human populations,
	energy, air, land, and water, will benefit future
	generations and contribute to our quality of
	life.
	Cultural and environmental knowledge can
	help enhance quality of life, now and into the
	future.
	• Current and future value is derived from
	preserving biological, historical, and cultural
	diversity.
	• Values toward, and attitudes about, natural
	and cultural resources vary and are enriched by
	diversity of lifestyles and livelihoods.
Behavior	Forest Service conservation education
Conservation education should also eventually	encourages behaviors that do the following:
result in signs of changes in behavior, which	• Consider long- and short-term economic costs
benefit the resources and are evidenced through	and benefits of personal actions on
changes in resource management practices.	environmental quality.
	• Differentiate between supportive and
	destructive actions toward natural and cultural
	resources.
	• Evaluate the effect of personal activities and
	social policies on natural and cultural
	Tesources.
	• Take positive action to resolve and prevent
	Develop a lifestule that group star
	• Develop a mestyle that promotes
	and sonsitivity to cultural issues
	and sensitivity to cultural issues.
	• Consider and respect the diversity of cultures

and their effects on, and contributions to,
resolving conservation issues.
• Commit to maintaining natural functions and
cycles within ecosystems and commit to
ensuring biological diversity.

Appendix B:

Table 1.	
Stakeholders for Conservation Education	Stakeholder Responsibility
Framework	
Umpqua National Forest (Crucial Stakeholder)	Develop CE Framework and partnerships
United States Forest Service Regional Office	Provide support for CE Framework as well as
(Interested Stakeholder)	increase awareness
United States Forest Service Washington Office	Provide support for CE Framework as well as
(Interested Stakeholder)	increase awareness
AmeriCorps*VISTA (Crucial Stakeholder)	Develop CE Framework and partnerships
Schools (Interested Stakeholder)	Implement framework into curriculum and give
	support to educators
Educators (Interested Stakeholder)	Implement framework into curriculum
Students (Interested Stakeholder)	Learn about natural resources
Parents (Interested Stakeholder)	Support their children in learning about natural
	resources
Non-Profit Organizations (Involved	Partners
Stakeholder)	
Roseburg District Bureau of Land Management	Partner
(Interested Stakeholder)	
Community Members (Outsider Stakeholder)	Support the framework and increase awareness
	in the community
Other agencies (Involved Stakeholder)	Partners
OSU Extension Office (Involved Stakeholder)	Partner

Appendix C:

	Program Name	Contact Information	Description	Target Audience	Program Activities	Cost	# of times presented/y	Partners
1	Education Outreach (BLM)	Joe Ross, Supervisory Multi- Resource Specialist 541-464-3248 Joseph_Ross@blm.g ov	Program responds to requests from the public to provide talks, presentations on a variety of topics (e.g. forestry, wildlife, fisheries, archaeology, etc.)	Grades K-12	Field trips/ classroom visits by BLM staff	Free	5-10/yr	None
2	Diversity Endangered Poster Exhibit (BLM)	Joe Ross, Supervisory Multi- Resource Specialist 541-464-3248 Joseph_Ross@blm.g ov	Traveling exhibit that examines the causes, consequences, and potential solutions to the loss of biological diversity.	Grades 6-12	Indoor exhibit	Free	Varies upon request	Agencies, non-profits
3	Learning Opportunities Booklet (BLM)	Joe Ross, Supervisory Multi- Resource Specialist 541-464-3248 Joseph_Ross@blm.g ov	Flexible programs on a variety of topics offered by BLM speakers for schools and clubs—some 30 different programs are offered	Grades 3-adult	Talks, slide shows, field sessions	Free	10 times/yr	Agencies, universities non-profits
4	Glide Middle School Partnership (BLM & USFS)	Steve Hofford 541-957-3361 shofford@fs.fed.us Joe Ross 541-464-3248 Joseph_Ross@blm.g ov	Water Quality Monitoring Program at 5 different sites in Little River Watershed.	8th grade students	Outdoor monitoring program	Free	One introductory presentation- data collected once a week	Glide Middle School- Hands on the Land program,
5	Douglas County School Forestry Tour (OSU Extension Office)	Elissa Wells 541-672-4461 Elissa.Wells@ oregonstate.edu	Tour that introduces 5 th graders to forest management & products, tree identification, wildlife, fisheries, fire, and archaeology.	5th grade students	Field trips, hands-on learning activities, & booklet of classroom activities	Free	2nd week of May	Agencies, non-profits, colleges, businesses
6	4-H Youth Development (OSU Extension Office)	Robin VanWinkle, 4H agent 541-672-4461 robin.vanwinkle@ore gonstate.edu	Provides educational projects and activities in over 50 different project areas including: Animal Science, Horticulture, Natural Science, Forestry, Entomology, Geology, Marine Science, Engineering, Expressive Arts, and Leadership.	Grades 4-12	Club setting where volunteer leaders work with a group of youth	\$10 annual fee for 1st project and \$5 for additional projects	Year long projects	None

Chart 1. Summary of Conservation Education Programs Available to Douglas County Residents

7	4-H Youth	Jodi Smith, Youth	The OSU Extension office can provide 4-H curriculum to schools free of charge. The objective of	Grades	After school	Prices vary	Varies upon	None
	Forestry Program (OSU Extension Office)	Assistant 541-672 4461 Robin VanWinkle, 4H agent 541-672-4461 robin.vanwinkle@ore gonstate.edu	the program is to enhance youth understanding of natural resource issues and forest management activities.	K-8	programs, summer day camps, and field trips	depending on activity: range is free to \$95 for a camp	request	
8	Alder Creek Children's Forest (non-profit)	ACCF Office 541-839-4379 Alan Baumann, Board of Directors, 541-957-3446 abaumann@fs.fed.us	Student-based terrestrial and aquatic inventory of the Alder- Jordan Creek watershed, intended to establish a baseline for watershed management, restoration, and monitoring.	Grades 6-12 & teachers	Outdoor study, field research, teacher workshop	Free	Provided on a monthly basis	USFS, Cow Creek Band (Umpqua Tribe), others- Hands on the Land site, BLM
9	Linking Girls to the Land (non-profit)	Karen Reister 541-672-2401 Joe Ross, Supervisory Multi- Resource Specialist 541-464-3248 Joseph_Ross@blm.g ov	Week-long day camp and other programs that focus on natural resources and careers for women in that field.	Girls in grades 6-12	Indoor/ outdoor programs, camp	Free	Varies- usually 1/yr	Bureau of Land Management
10	Umpqua Valley Migratory Bird Festival		One-day festival held in conjunction with International Migratory Bird Day.	K-adult	Art show, live birds, games, music	Free	1	8-10 partners, incl. USFWS & other agencies
11	Salmon Trout Enhancement Program (ODFW)	Laura Jackson 541-440-3353	The program's main goal is to provide healthy, sustainable stocks of salmon and trout. The program allows volunteers to help out in a variety of ways. The Reedsport STEP takes students to their hatchery facility.	Anyone who wants to volunteer	Field work, surveys, habitat restoration	Free	All year	None
12	Youth Angling Enhancement Program (ODFW)	Laura Jackson 541-440-3353	Teaches youth how to fish at various stock ponds throughout the state.	Youth	Outdoor instruction	Free	All year	Oregon Wildlife Heritage Foundation
13	Aquatic and Angler Program (ODFW)	Laura Jackson 541-440-3353	The goal of the program is to provide youth with an understanding of	Public &Youth	Instructional Curriculum, Teaching Materials, Student	Free	Available upon request	None

			aquatic ecosystems and to develop the skills, knowledge, and responsibilities associated with angling.		Manuals, Equipment, & Teaching Aids			
14	Free Fishing Days (ODFW)	Laura Jackson 541-440-3353	Youth fish for trout in various ponds throughout the state.	Youth	Fishing instruction	Free	1	None
15	Classroom Incubator Program (ODFW)	Laura Jackson 541-440-3353	Students have the opportunity to watch the salmon life cycle take place by rearing salmon eggs.	Grades 3-12	Indoor activities	No but classes must provide aquariums	Available upon request	None
16	Oregon Hunter Education Course (ODFW)	Hedge Jarvis 541-672-2313	A course that teaches hunter ethics and respect for private landowners, wildlife management and identification, firearms handling and safety, hunt preparation and techniques, survival, and an introduction to bowhunting.	Residents of Douglas County (There is no minimum age to attend a course, but children under age 11 often have a difficult time with the material and work load.)	Classes, Live Fire Exercise, & Evaluation	\$5 per student	April– September	None
17	Tsalila Festival	541-902-6960	Tsalila helps build awareness of natural resources for students.	Public	Interpretativ e tours, curriculum for local schools, & habitat restoration field trip, Native American dancing performance, and storytelling from Pacific Northwest entertainers	Free	1 September	Local, State, Federal, and Tribal Organization
18	Tsalila Spring	541- 902-6960 Laura Jackson 541-440-3353	Fisheries habitat restoration work and a variety of other topics are learned. A poster contestant is available in February or March for students.	Grades 2-8	Field trips, outdoor activities; poster contests	Free	February & March	ODFW, Umpqua Fisherman, Reedsport STEP, other organization
19	Eastwood Elementary Outdoor Education Program	Jill Weber, Principal 541-440-4195 x224 jweber@roseburg.k1 2.or.us	Provides conservation education for students & the community.	Students & the public	Outdoor classrooms and labs, fish hatchery, nature trails,	Free	All year	ODFW, Umpqua Fishermen's Association, Project

					& observation classrooms			Leadership, Umpqua Community College, Roseburg High School
20	Youth Wilderness Campout (Umpqua Watersheds)	Nelli Williams, Outreach Campaign Coordinator 541-672-7065 nelli@umpqua- watersheds.org	Teaches youth basic camping techniques, forest monitoring, first aid, & a variety of other topics.	Ages 8-19	Weekend camping trip	Free	1	Community members & guest lecturers
21	Mildred Kanipe Memorial Park (DSWCD)	Jim Lee, Project Manager 541-957-5061 jim.lee@oacd.org	Students learn how to restore the park by tree planting, noxious weed control, trail reconstruction, wetland restoration, and stream bank stabilization.	Grades 3-12	Restoration instruction & hands-on learning activities	Free	All year with different groups	EPA & Title 3 Grant, 10 Community Groups
22	Watershed Education Program (DSWCD)	Jim Lee, Project Manager 541-957-5061 jim.lee@oacd.org	Students write natural resources management plans for a piece of property with the help of guest lecturers, interviews, and landowners.	Schools	Guest speakers, site visits, and natural resource management plans	Free	1 school per semester	OWEB, ODFW, & other local organization
23	Healthy Homes of Myrtle Creek (DSWCD)	Jim Lee, Project Manager 541-957-5061 jim.lee@oacd.org	Goal is to improve quality of the watershed in Myrtle Creek area.	Public	Information sessions & school visits	Free	Funded until Fall 2006	Oregon Department of Environment al Quality, Partnership for the Umpqua Rivers, Douglas County Waste Reduction, and City of Myrtle Creek
24	Student Career Experience Program (Federal Government)	Glenn Fetter, Human Resources Specialist Umpqua National Forest 541-957-3284 gfetter@fs.fed.us	Provides work experience that is directly related to the student's academic program or career goals. SCEP gives students exposure to public service while enhancing their educational goals.	High school & college students	Internship; job experience	Free	Year long program	None
25	Student Temporary Employment Program (Federal Government)	Glenn Fetter, Human Resources Specialist Umpqua National Forest 541-957-3284 gfetter@fs.fed.us	Provides an opportunity for students to earn money, continue their education, train with professionals, and combine	High school & college students	Internship	Free	Year long program	None

			academic study with on-the-job experience.					
26	United States Forest Service	Sue Baker Baker04@fs.fed.us www.na.fs.fed.us/spf o/ce/index.cfm	FS website offers free curriculum materials for teachers and online activities for students such as a virtual tour through the forest or a link to the <i>Natural Inquirer</i> magazine.	Grades K-12, Teachers	Curriculum & online activities	Free	All year	Government agencies that manage public lands, EPA, Department of Education, Project Learning Tree, & other non- profits
27	Umpqua National Forest Speakers Bureau (USFS)	541-672-6601	Guest speakers present a variety of topics including restoration, future of the forest, fisheries, & more.	Public	Guest speakers & presentations	Free	Varies upon request	None
28	Umpqua National Forest	541-672-6601	Offers "Greatest Good" video that explains the history of the Forest Service.	Public	Video	Free to rent or available for purchase	Varies upon request	
29	Oregon Dunes National Recreation Area	Siuslaw National Forest 541-271-6000	Small visitor display about the dunes ecosystem & a small theater for films. Staff is available for talks throughout the school year.	Public	displays, films	Free	Varies upon request	None
30	Resources and People Camp (USFS)	Shirley Kerns 541-883-6716 skerns@fs.fed.us	Week-long camp designed to introduce high school students to natural resource management topics and careers	High school students & teachers	Camp, outdoor activities	Yes, but BLM Roseburg provides scholarships	1	Other agencies, non-profits
31	Adaptation Camp (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Camp teaches how to classify animals.	Ages 4-12	Take home activities, drive through information session	Ages 7-12: \$22 a day or \$60 for all 3 days Ages 4-7: \$12 a day or \$30 for all 3 days	3 day camps offered during March and June	
32	Conservation Camp (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Camp teaches youth about loss of habitats & extinction prevention	Ages 4-12	Information session & animal viewing	Ages 7-12: \$22 a day or \$60 for all 3 days Ages 4-7: \$12 a day or \$30 for all 3 days	3 day camps offered during July	
33	Animal Care Camp (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Camp teaches youth how to feed, house, clean, and care for the animals	Ages 4-12	Animal feeding, elephant bathing, & other activities	Ages 7-12: \$22 a day or \$60 for all 3 days Ages 4-7: \$12 a day or \$30 for all 3 days	3 day camps offered during August	
34	Animal Outreach	Christine Spencer, Director of Education	Animal Ambassadors	Ages varied	Information session &	Time is charged by	All year- make	

	(Wildlife Safari)	541-679-6761x260 wildlifesafari_spence @yahoo.com	bring animals to schools, organizations, & businesses		hands-on learning activities	the hour & mileage traveled	reservations 2 weeks in advance	
35	Noon Visits (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Animal Ambassadors bring animals & artifacts to schools during lunch break	Ages varied	Presentation	Time is charged by the hour & mileage traveled	All year- make reservations 2 weeks in advance	
36	Which is Which? (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students learn how to classify animals & about their adaptations.	Home school students ages 7-12	Information sessions & activities at the park	\$6/class for non- members & \$4 for members	All year-2 or 4 hour sessions	
37	Which is Which? Jr. (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students learn how to classify animals & about their adaptations.	Home school students Ages 4-7	Information sessions & activities at the park	\$6/class for non- members & \$4 for members	All year-2 or 4 hour sessions	
38	Wild! (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students learn about the adaptations of animals & observe animal life at the park.	Home school students Ages 7-12	Information sessions & activities at the park	\$6/class for non- members & \$4 for members	All year-2 or 4 hours sessions	
39	Wild! Jr. (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students learn about the adaptations of animals & the different types of animals around the world.	Home school students Ages 4-7	Information sessions & activities at the park	\$6/class for non- members & \$4 for members	All year-2 or 4 hour sessions	
40	Candid Conservation (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students learn about different wildlife habitats & what they can do to help animals survive in the wild.	Home school students Ages 7-12	Information sessions & activities at the park	\$6/class for non- members & \$4 for members	All year-2 or 4 hours sessions	
41	Candid Conservation Jr. (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students learn about different wildlife habitats & how to keep the habitats clean.	Home school students Ages 4-7	Information sessions & activities at the park	\$6/class for non- members & \$4 for members	All year-2 or 4 hour sessions	
42	Simply Science (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students learn about the scientific method, animal behavior, & observe the animals in the park.	Home school students Ages 7-12	Information sessions & activities at the park	\$6/class for non- members & \$4 for members	All year-2 or 4 hour sessions	
43	Simply Science Jr. (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students act as nature detectives & search for animal clues along nature trails at the park.	Home school students Ages 4-7	Information sessions & activities at the park	\$6/class for non- members & \$4 for members	All year-2 or 4 hours sessions	
44	The Zoo View (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students get a tour of the park & watch a live animal show.	Home school students Ages 4-12	Tour & live show	\$6/class for non- members & \$4 for members	All year-2 or 4 hour sessions	
45	Mission Zoopossible (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students learn the basics of animal care & training.	Home school students Ages 7-12	Information sessions, animal feeding, & animal	\$6/class for non- members & \$4 for members	Available from Labor Day through Memorial Day	

					training			
46	Mission Zoopossible Jr. (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students learn the basics of animal care & training.	Home school students Ages 4-7	Information sessions, animal feeding, & animal training	\$6/class for non- members & \$4 for members	Available from Labor Day through Memorial Day	
47	Junior Zookeeper Program (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Introduces students to animal classification, animal behavior, building exhibit design, public relations and customer service, and zoo related laws and organizations.	Ages 12-18	Students are responsible for creating and evaluating diets, exhibits, procedures, and protocols; teaches job skills necessary for entering a career in the zoological field.	Free	Half hour long classes and meetings once a week from September- May; applications, interviews, and orientation begin in August	
48	Youth Ambassador Program (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Students assist the staff with animal care and educating and entertaining the park's guests	Ages 13-17	Gain work experience, job skills, and volunteer hours	\$25 to cover the cost of the uniform	Once a week from September- May	
59	Natural Resource Education Program (Wildlife Safari)	Christine Spencer, Director of Education 541-679-6761x260 wildlifesafari_spence @yahoo.com	Classes include earth science, freshwater macroinverteb- rates, chemical water quality monitoring, wetlands invasive species and remediation, forestry, and stream studies.	High school students	Field-trip service	Free transport & equipment included		BLM
50	Oregon Natural Resources Research Institute (non-profit)	Bob Craft 541-680-7938, bcraft@smotis.com Lenny Schussel 541-679-4997 lenny@howdt.com	Increase the interest and enthusiasm that students have for the study of math and science, through interaction with professionals in a variety of scientific disciplines. The program is meant to be a resource that aids students in reaching the benchmarks set forth in the state standards of science.	All students	Research projects & online school enrichment knowledge base	Free	Available upon request	Touch A Life Learning Partnership, Wildlife Safari, BLM, Wolf Creek Job Corps, & other organization
51	Project Learning Tree (non-profit)	Susan Sahnow 541-737-3005 Debbie Anderson, Facilitator 541-957-3466 danderson01@fs.	The topics the curriculum cover ranges from forests, wildlife, water, community planning, waste management,	Teachers, parents, or other educators who work with pre K-12	Educator Workshops	Free	2 workshops a year	Oregon Forestry Education Program (OFEP) through Oregon State

		fed.us	biodiversity, risk, and energy.	students				University, and OFRI
52	Talk About Trees (non-profit)	Paula Yablonski, Facilitator 541-837-3545 paula@rogueriver.net	A science-based program that encourages appreciation for trees & forests while explaining principals about protection, management, & conservation of forests.	Grades PreK-8	Presentation, outdoor classroom, & activities	Free	Varies upon request	OFRI & Oregon Women in Timber
53	Oregon Teachers on Summer Assignment (non-profit)	Norie Dimeo-Ediger 503-229-6718	Teachers work with company or agency mentors on forest management & environmental monitoring projects. They get a 1st hand look at how science, math, & other curricula are applied by forestry professionals in the workplace.	K-12 teachers	Curriculum development workshops, hands-on environment al monitoring tasks	Free & college credit is available	6-weeks in summer	OFRI
54	Wolftree Watershed Ecology Program (OFRI)	Jay Hopp, Education Director 503-239-1820	Participants study the streams and forests of the Pacific Northwest & develop community based ecological field study/research sites.	4-12 teachers	Field trips & outdoor activities	Free	Fall, Spring, Summer	Wolftree
55	Jackson Bottoms Wetland Preserve	Sarah Pinnock 503-681-6278 sarahp@ci.hillsboro.o r.us	Offers a wide range of educational programs for all ages. A new Wetlands Education Center provides interactive exhibits, indoor multipurpose classroom, volunteer works space, & restrooms.	Grades K-12	Active participatory learning opportunities	Call for rates. OFRI will provide busing to those who apply	All year M-S 10am-4pm	OFRI
56	Larch Mountain Environmental Education Site	Scott Brayton Bureau of Land Management 503- 375-5638 www.or.blm.gov/sale m/html/rec/larch.htm	This forest site contains old- growth characteristics with Douglas fir & western hemlock along with younger planted trees. There is a trailhead with limited parking, a vault type restroom, designated trails	Grades K-12	Field trip, outdoor program	Free. OFRI will provide busing to those who apply		OFRI

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57	Oregon Forest	Susan Sahnow	& 2 open-air, 24- foot shelters with picnic tables. This site is in a primitive, natural setting & can be used for habitat, stream, soils & forest ecology activities. Staff assistance is available for planning and developing science-based field trips or you can plan your own activities.	K-6	Teacher	Free &	Summer	OFRI
5/	Institute for Teachers (OFIT)	541-737-3005	An intensive 5 day summer forestry education program that provides K-12 teachers the knowledge, skills, & tools needed to develop materials & activities they can use in their classrooms to effectively teach their students about forest- related activities.	K-0 teachers	workshop	college credit is available	Summer	OFRI
58	Port Blakely Tree Farms	Cindy Quam 503-399-8085 cquam@portblakely.c om	Offers an interactive forestry experience in which students identify trees, observe signs of wildlife, investigate tree growth, & hunt for insects as they traverse an ADA accessible trail. The trail features a variety of forest types including a plantation, riparian area, & mature forest. Picnic shelter and restrooms available.	Grades 3-6	Field trip, outdoor program	Free. OFRI will provide busing to those who apply		OFRI
59	Science in the Forest	Norie Dimeo-Ediger 503-229-6718 Wolftree 503-239-1820 wolftree@beoutside.c om	Comprehensive experiential science inquiry education program that uses the forest to deepen and enliven science curriculum with cutting edge classroom activities and	Grades 5-12	Field trip, outdoor program	Free. OFRI will provide busing to those who apply		OFRI

I				on outdoor field studies. The					
				educational goal is to					
				accommodate the full range of					
				learning abilities,					
				cultures, and ages through a flexible					
				science program					
				that actively					
				participants in the					
				science inquiry					
				are challenged to					
				use their creative					
				order thinking					
				skills, cultivate					
				in science and					
ļ	60	Oregon	503-797-4661	math. Scientific,	Teachers,	Field trips to	Group rates	Open all	
		Museum of		educational, and	students,	the	of 12 atudanta ar	year	
		Industry		center dedicated	public	exhibits,	more \$60		
		(non-profit)		to improving the		reserved			
				understanding of		festivals,			
				science and technology.		after school programs.			
				OMSI offers		traveling			
				programs, &		camps,			
				experiences that		teacher			
				an entertaining		&			
				and participatory fashion		planetarium			
ľ	61	Umpqua	Portia Harris	The Umpqua	Public	Interactive	\$8 for adults,	Open 7 days	Confederate
		Center	541-2/1-4816 info@umpquadiscove	is an educational		programs	\$4 for kids ages 6-15,	a week year round except	d Tribes of Coos, Lower
			rycenter.com	and cultural		1 0	\$7 for	Thanksgivin	Umpqua, &
				ages making			seniors	g, Christmas, and New	Siusiaw Indians;
				active, innovative				Year's Day	USDA Forest
				preserving the					Service;
				Oregon "Tidewater					Bureau of
				Community"					Management
	62	Douglas Forest	Tom Fields, Public	experience. DFPA has many	Public.	Guest	Free	Schools are	NOAA OSU
	-	Protective	Information Officer	educational &	Grades	lectures &		called in	Extension
		Association	541-672-6507 tfields@odf.state.or.u	programs for the	K-3	presentations		Feb. to make appointment	
			s	public in fire				for the	
				prevention. They				Visitation	
				help with the				Program.	
				Forestry Tour.				held in	
				DFPA's main				April.	
				students is the					
				Spring Visitation program. A					
				representative					
1				goes to all	1	1	1	1	

			elementary schools in Douglas County & gives a presentation on fire prevention, wilderness safety, & camp fire safety.					
63	Glide Wildflower Show (non-profit)	541-677-3797 magyan@ wizzards.net	The show features hundreds of plants from the diverse habitats of SW Oregon, arranged by family & identified by botanical & common names.	Public & students	Students view exhibits, attend science workshops, & hands-on activities	Free	April	Non-profit, volunteers, USFS
64	Environmental Education Programs through Oregon Gardens	Fran Gray, Environmental Education Coordinator 503-874-8248 http://www.oregonga rden.org/index.html	Environmental education programs that teach environmental and biological subjects that meet bench marks set by the state and include subjects such as habitat, tracking, birds, aquatic life, insects, watershed ecology, pollination, plant adaptation, journaling, and more.	K-12 students, home groups, Pre-K, etc.	Hands-on learning, outdoor activities, field trip	\$60 per program (1.5 hours), \$3 per student admission into garden, and chaperones are admitted free. There is a 5th grade grant program available to all 5th grade classes in OR. The grant covers transportatio n, cost of program, and cost of admission into garden, and bus driver for one visit a vear	Open all year except holidays	City of Silverton, private companies, & non- profits
65	Rediscovery Forest Programs through Oregon Gardens	Julie Woodward 503-874-8265 woodward@ofri.com	Students are offered a range of activities involving tree biology, wildlife habitat, plant identification and forest ecology and management in the Oregon Garden Rediscovery Forest. In addition to classroom visits, a five-day forestry camp is available in the summer. The forestry program is structured to meet Oregon Department of Education	k-12 students, scouts, brownies, etc.	Hands-on learning, outdoor activities, field trip	The Oregon Garden and OFRI may be able to cover the program cost, admission to the Garden, and transportatio n costs. Participants must submit a request form and an additional transportatio n reimburseme nt form. After a review of applications.	Open all year except holidays	OFRI, private companies, non-profits, and City of Silverton

			benchmarks and content standards.			participants will be		
						with details of their trip.		
66	Magness Memorial Tree Farm through World Forestry Center	Rick Zen, Education Director 503-488-2103	An outdoor education site for school and youth groups. Groups can choose to go at their own pace and take a self- guided tour or get personalized attention with the "Walks and Talks" program designed to complement topics being studied in the classroom. Each of the educational programs and tours has been designed to correlate with age- appropriate state and national curriculum guidelines.	Groups of all ages	Demonstrati on Forest, outdoor education site, and guided tours	Free and open to the public daily. Fees are charged for education classes and rental of facilities: \$4.50 for students and chaperones are free	Open all year.	Local landowners, donations from community members
67	Discovery Center at World Forestry Center	Rick Zen, Education Director 503-488-2103	Ist floor of the museum shows how forests have systems, structure, & cycles. 2nd floor highlights "People & Forests" and how they interact around the world. There is gallery space devoted to temporary exhibits that explore art, history, & culture from around the world.	Groups of all ages	Indoor activities & exhibits	Museum Self-Guided Exploration costs \$3.50 & chaperones are free	Open all yearMake reservations 4-6 weeks in advance.	Timber industry, educational community, and many others
68	Johnson- Swanson Memorial Tree Farm through World Forestry Center	Rick Zen, Education Director 503-488-2103	Tree farm located near Silverton, OR available for educational visitations or service learning projects.	Groups of all ages.	Outdoor activities	Free	Currently only open by arrangement.	Landowners, donations from community members
69	Umpqua Valley Audubon Society (non-profit)	Maryanne Wilcox President 541-440-9917	Field trips on Saturdays for anyone to attend to go birding & newsletter for use	Public	Field trips & newsletter	Free field trip, \$30 for year's worth of newsletters	All year	

			in classroom is available					
70	The Hinkle Creek Paired Watershed Study	Watersheds Research Cooperative, Javier Goirigolzorri 541-957-9001 rms@rosenet.net	10 year research project studying effects of interactions of modern intensive forest management with watershed health, water quality, & fisheries.	Students, educators, NR profession als, landowne rs, public leaders, & non- profits	Field trips, tours, observations, & demonstratio ns	Free	All year	OSU, Roseburg Forest Products, BLM, USGS, OFRI, OWEB, Umpqua Fisheries Enhancemen t Derby
71	Salmon Watch	Robin Hartmann 541-672-3694 robinhartmann@ msn.com	Natural resource experts & volunteers assist teams of students at 4 learning stations established on the river's edge. Students learn about macro- invertebrates, water quality, & salmon life cycle.	Grades 4-12	Field trip, hands-on activities, & students develop a service project to benefit the community & river.	Free	Fall months	Oregon Trout, USFS
72	Electronic Field Trips (BLM)	Kevin Flynn, <u>Kevin_Flynn@blm.g</u> <u>ov.</u> <u>http://www.blm.gov/</u> <u>education/</u>	Online interactive educational programs on a variety of topics including fire, renewable energy, and habitats	Grades K-12	Interactive online information	Free	Varies, usually one a year	Distance Learning Integrators
73	Fun at the Creek Day Camp (non-profit)	June Fothergill Safe Place for Kids 541-863-4257 jfother@mcsi.net	A day camp that allows students to learn about Myrtle Creek and its watershed and history.	Grades K-6	Guest speakers, games, crafts, and nature walks		August 22- 26	Canyonville United Methodist, First Christian, Tri City Presbyterian, and Ascension Episcopal Churches.
74	Glendale Regional Watershed Science Symposium (school)	Dave Grosjacques Teacher dasa2@earthlink.net Tom McCormick Principal 541-832-2486	The symposium provides an opportunity for students, educators, natural resource agencies, businesses, and local citizens to showcase positive projects and programs that strengthen the community. Students create exhibits after doing research on a variety of watershed topics.	Grades 3-12	Guest speakers, exhibits, and outdoor fish hatchery activities	Free	March 15, 2006	Cow Creek Umpqua Indian Foundation, Glendale School District, Swanson Group, USFS, and Oregon Stewardship

Appendix D:

Chart 2. Umpqua National Forest Conservation Education Efforts

Program Name	Contact Information	Description	Target Audience	Program Activities	Cost	# of times presented/vr	Partners
Glide Middle School Partnership (BLM & USFS)	Steve Hofford 541-957-3361 <u>shofford@fs.fed.us</u>	Water Quality Monitoring Program at 5 different sites in Little River Watershed.	8th grade students	Outdoor monitoring program	Free	One introductory presentation- data collected once a week	Glide Middle School-Hands on the Land program,
Douglas County School Forestry Tour (OSU Extension Office)	Elissa Wells 541-672-4461 Elissa.Wells@ oregonstate.edu	Tour that introduces 5 th graders to forest management & products, tree identification, wildlife, fisheries, fire, and archaeology.	5th grade students	Field trips, hands-on learning activities, & booklet of classroom activities	Free	2nd week of May	Agencies, non-profits, colleges, businesses
Alder Creek Children's Forest (non-profit)	ACCF Office 541-839-4379 Alan Baumann, Site Manager, 541-957-3446 abaumann@fs.fed.us Chris Rusch Board of Directors 541- 825-3147 crusch@fs.fed.us	Student-based terrestrial and aquatic inventory of the Alder-Jordan Creek watershed, intended to establish a baseline for watershed management, restoration, and monitoring.	Grades 6-12 & teachers	Outdoor study, field research, teacher workshop	Free	Provided on a monthly basis	USFS, Cow Creek Band (Umpqua Tribe), others-Hands on the Land site, BLM
Umpqua Valley Migratory Bird Festival		One-day festival held in conjunction with International Migratory Bird Day.	K-adult	Art show, live birds, games, music	Free	1	8-10 partners, incl. USFWS & other agencies
Student Career Experience Program (Federal Government)	Glenn Fetter, Human Resources Specialist Umpqua National Forest 541-957-3284 gfetter@fs.fed.us	Provides work experience that is directly related to the student's academic program or career goals. SCEP gives students exposure to public service while enhancing their educational goals.	High school & college students	Internship; job experience	Free	Year long program	None
Student Temporary Employment Program (Federal Government)	Glenn Fetter, Human Resources Specialist Umpqua National Forest 541-957-3284 gfetter@fs.fed.us	Provides an opportunity for students to earn money, continue their education, train with professionals, and combine academic study with on-the- job experience.	High school & college students	Internship	Free	Year long program	None
United States Forest Service	Sue Baker Baker04@fs.fed.us www.na.fs.fed.us/spfo/ ce/index.cfm	FS website offers free curriculum materials for teachers and online activities for students such as a	Grades K-12, Teachers	Curriculum & online activities	Free	All year	Government agencies that manage public lands, EPA, Department
	541 (72 (00)	virtual tour through the forest or a link to the <i>Natural</i> <i>Inquirer</i> magazine.	D.L.		r.		of Education, Project Learning Tree, & other non-profits
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Umpqua National Forest Speakers Bureau (USFS)	541-672-6001	fuest speakers present a variety of topics including restoration, future of the forest, fisheries, & more.	Public	speakers & presentations	Free	varies upon request	None
Umpqua National Forest	541-672-6001	Offers "Greatest Good" video that explains the history of the Forest Service.	Public	Video	Free to rent or available for purchase	Varies upon request	
Oregon Natural Resources Research Institute (non-profit)	Bob Craft 541-680-7938, bcraft@smotis.com Lenny Schussel 541-679-4997 lenny@howdt.com	Increase the interest and enthusiasm that students have for the study of math and science, through interaction with professionals in a variety of scientific disciplines. The program is meant to be a resource that aids students in reaching the benchmarks set forth in the state standards of science.	All students	Research projects & online school enrichment knowledge base	Free	Available upon request	Touch A Life Learning Partnership, Wildlife Safari, BLM, Wolf Creek Job Corps, & other organization
Project Learning Tree (non-profit)	Susan Sahnow 541-737-3005 Debbie Anderson, Facilitator 541-957-3466 danderson01@fs. fed.us	The topics the curriculum cover ranges from forests, wildlife, water, community planning, waste management, biodiversity, risk, and energy.	teachers, parents, or other educators who work with pre K- 12 students	Educator Workshops	Free	2 workshops a year	Oregon Forestry Education Program (OFEP) through Oregon State University, and OFRI
Salmon Watch	Robin Hartmann 541-672-3694 robinhartmann@ msn.com	Natural resource experts & volunteers assist teams of students at 4 learning stations established on the river's edge. Students learn about macro- invertebrates, water quality, & salmon life cycle.	Grades 4-12	Field trip, hands-on activities, & students develop a service project to benefit the community & river.	Free	Fall months	Oregon Trout, USFS
Glendale Regional Watershed Science Symposium (school)	Dave Grosjacques Teacher dasa2@earthlink.net Tom McCormick Principal 541-832-2486	The symposium provides an opportunity for students, educators, natural resource agencies, businesses, and local citizens to showcase positive projects and programs that strengthen the community. Students create	Grades 3-12	Guest speakers, exhibits, and outdoor fish hatchery activities	Free	March 15, 2006	Cow Creek Umpqua Indian Foundation, Glendale School District, Swanson Group, USFS, and Oregon Stewardship

		exhibits after doing research on a variety of					
		watershed topics.					
SEP American	Jim Archuleta	AISES American					USFS
Indian Program	Soil Scientist	Indians In Science					
	Diamond Lake Ranger	and Engineering:					
	District	Support of the					
	541-498-2551	This has been					
	Iuliana Marez	somewhat					
	AISES	successful The					
		forest has					
		identified 2					
		students for fire					
		positions and one					
		for a STEP					
		Position, through					
		chapter. This					
		chapter has had a					
		fluctuating					
		membership of late					
		and seems to be					
		declining. Support					
		has been in the					
		of membership fees					
		(\$100 total) over 3-					
		4 years and the					
		hours of Archuleta					
		to attend meetings					
		using SEPM Mgt					
Farth Day	Leff Dose	Lode.	Public	Guest	Free	April	Local
Earth Day	Forest Fish Biologist	Tent and uses it as	Tublic	Speakers	The	Арт	businesses
	Supervisor's Office	a prop for story-		Information			community
	541-957-3301	telling with a		Booths, and			members,
	jdose@fs.fed.us	conservation		outdoor			agencies, and
	x	theme.		activities			non-profits
River	Jeff Dose	Jeff brings his Fish	Public	River	Free	3rd Saturday	NGO's, State
Appreciation	Supervisor's Office	a prop for story		talling, story		in July	and Federal
Day	541-957-3301	telling with a		nainting			agencies,
	idose@fs.fed.us	conservation		organization			
		theme.		al booths, a			
				puppet			
				show, food			
				and			
				beverages,			
				and lots of			
				music			
District and	Kevin Sands	This involves many	FFA	involves a	Free to	May-Varies	USFS,
State FFA	Wildlife Technician	of the high schools	Students	general	students	year to year	volunteers
Forestry	Tiller Ranger District	in the county that	grades 9-12	knowledge			from Tiller
Contests	541-825-5152 keende@fs_fed.us	nave FFA		test, timber			Kanger District
	<u>x5a1105(0)15.100.08</u>	state contest brings		ID forestry			District
	Chris Rusch	in schools from as		tool ID. a			
	District Botanist	far away as		compass and			
	Tiller RD	Portland and Gold		pacing			
	541-825-3147	Beach. The events		course, and			
	crusch@fs.fed.us	include tests for		knowledge			
		map reading,		of timber			
		nacing tree and		improvemen			
		plant I.D.		t treatments			
		silviculture,		. a cathonas			
1			1	1	1	1	

		and general					
~ . ~		forestry.			-		
Salmon Camp	Jim Archuleta Soil Scientist Diamond Lake Ranger District 541-498-2531 Robin Hartmann 541-672-3694 robinhartmann@ msn.com Dan Calvert DCalvert@omsi.edu	Program of OMSI, the Oregon Museum of Science and Industry based in Portland. The program is underwritten by several foundations that support the Salmon Camp program through the OMSI.	Native American High School Students		Free		North Umpqua Foundation, grants through NSF, USFW, and ODFW
4-H and FFA Forestry and Outdoor World Contest	Chris Rusch District Botanist Tiller RD 541-825-3147 <u>crusch@fs.fed.us</u>	Chris helps set up and judge the 4-H and FFA Forestry and Outdoor World Contest at the Douglas County Fair every summer (August). She also assists in training before the contests.	Junior High and High School students involved in FFA or 4-H	Forest tree ID, Out door world contest consists of map reading, identifying things like bird and animal skulls, pelts, rocks, cones etc.		August	OSU Forestry Extension, USFS, Douglas County 4-H
Tree Planting	Chris Rusch District Botanist Tiller RD 541-825-3147 crusch@fs.fed.us	Chris has taken numerous groups of elementary kids out to plant trees.	Elementary students	Tree Planting	Free to students; costs Chris time and cost of trees	April	
Milo Academy	Chris Rusch District Botanist Tiller RD 541-825-3147 <u>crusch@fs.fed.us</u>	Chris has worked with high-school students from Milo Academy on various science projects regarding rare plants.	Milo Academy High School Students	Science Projects	Free	Varies	
Glide Wildflower Show (non-profit)	541-677-3797 magyan@ wizzards.net	The show features hundreds of plants from the diverse habitats of SW Oregon, arranged by family & identified by botanical & common names.	Public & students	Students view exhibits, attend science workshops, & hands-on activities	Free	April	Non-profit, volunteers, USFS: Chris Rusch volunteers with collections and set up
South County Science Class	Robert Nichols Tiller Ranger District 541-825-3134 renichols@fs.fed.us	The classes visit trails, streams, stream rehab areas or just areas of interest where they talk about things like restoration, recreation, fish, etc.	Tiller	Field trip	Free	1-3 times per year	

Appendix E:

Subject or Component of	Specific Programs
Program	
Angler Education	Salmon Trout Enhancement Program, Youth Angling Enhancement Program,
	Aquatic and Angler Program, Free Fishing Days, Umpqua Discovery Center, Salmon
	Watch, Glendale Watershed Symposium
Animal Tracks and	Diversity Endangered Exhibit, BLM Learning Opportunities, 4-H Youth Forestry
Identification	Program, Linking Girls to Land, Youth Wilderness Campout, SCEP, STEP, USFS
	Online Activities, RAP Camp, Adaptation Camp, Animal Outreach, Noon Visits,
	Which is Which, Junior Zookeeper, Port Blakely Tree Farms, Environmental
	Education Oregon Garden, Rediscovery Forest
Archaeology	BLM Education Outreach, BLM Learning Opportunities, Douglas County School
	Forestry Tour, ACCF, Linking Girls to Land, Isailia Festival, SCEP, STEP, USFS
	OMSL Discovery Center at WEC
Dirding and Dird Identification	DIMSI, Discovery Center at WFC
Birding and Bird Identification	Opportunities A H Youth Forestry Program Linking Girls to Land UV Migratory
	Bird Festival Youth Wilderness Campout SCEP STEP USES Online Activities
	RAP Camp Adaptation Camp Animal Outreach Noon Visits Which is Which
	Junior Zookeeper Jackson Bottom Port Blakely Tree Farms Environmental
	Education Oregon Garden, UV Audubon Society
Botany/Weeds/Horticulture	BLM Education Outreach, BLM Learning Opportunities, 4-H Youth Development,
5	Linking Girls to Land, Tsalila Festival, Eastwood Elementary, Youth Wilderness
	Campout, Mildred Kanipe, Watershed Education Program, Healthy Homes, SCEP,
	STEP, USFS Online Activities, Greatest Good, RAP Camp, Natural Resource
	Education Program, Talk About Trees, Glide Wildflower Show, Environmental
	Education Oregon Garden, Rediscovery Forest, Magness Memorial Tree Farm,
	Johnson-Swanson Memorial Tree Farm, Hinkle Creek Study, Fun at the Creek Camp,
	Glendale Watershed Symposium
Camping, LNT principals,	Linking Girls to Land, Youth Wilderness Campout, USFS Online Activities, RAP
safety	Camp, Adaptation Camp, Conservation Camp, Spring Visitation Program,
	Rediscovery Forest, Fun at the Creek Camp
Community Planning	ACCF, Tsalila Festival, Mildred Kanipe, Watershed Education Program, Healthy
	Homes, Greatest Good, PL1, Wolffree Watershed Ecology Program, Hinkle Creek
Compage Man	Study DIM Learning Opportunities ACCE Linking Cirls to Lond Vouth Wildowses
Compass, Map	Compared Mildred Vaning Watershed Education Program SCED STED USES
	Online Activities DAD Comp. ONDEL OPTOSA Wolffree Watershed Ecology
	Program Larch Mountain Environmental Ed Site OFIT Science in the Forest
	OMSI Umpaua Discovery Center, Rediscovery Forest, Hinkle Creek Study
Engineering	BLM Education Outreach BLM Learning Opportunities 4-H Youth Development
	ACCF Tsalila Festival Mildred Kanipe Watershed Education Program SCEP
	STEP, Greatest Good, RAP Camp, ONRRI, Wolftree Watershed Ecology Program,
	Science in the Forest, OMSI, Hinkle Creek Study
Entomology/Macroinvertebrates	BLM Education Outreach, BLM Learning Opportunities, 4-H Youth Development,
	ACCF, Linking Girls to Land, Aquatic and Angler Program, Classroom Incubator
	Program, Tsalila Festival, Tsalila Spring, Eastwood Elementary, Youth Wilderness
	Campout, Watershed Education Program, SCEP, STEP, USFS Online Activities,
	Greatest Good, ODNRA, RAP Camp, Natural Resource Education Program, ONRRI,
	ORTOSA, Wolftree Watershed Ecology Program, Jackson Bottom, Larch Mountain
	Environmental Ed Site, Port Blakely Tree Farms, Science in the Forest, OMSI,

Chart 3. Breakdown of Programs into Subjects

	Environmental Education Oregon Garden, Rediscovery Forest, Hinkle Creek Study,
	Salmon Watch, Fun at the Creek Camp, Glendale Watershed Symposium
Fire	BLM Education Outreach, Diversity Endangered Exhibit, BLM Learning
	Opportunities, Douglas County School Forestry Tour, ACCF, Tsalila Festival,
	Eastwood Elementary, Youth Wilderness Campout, SCEP, STEP, USFS Online
	Activities, UNF Speakers Bureau, Greatest Good, RAP Camp, Talk About Trees,
	ORTOSA, Wolftree Watershed Ecology Program, OFIT, Science in the Forest,
	OMSI, Spring Visitation Program, Magness Memorial Tree Farm, Discovery Center
	at WFC, Johnson-Swanson Memorial Tree Farm, BLM Electronic Field Trips
Fisheries	BLM Education Outreach, Diversity Endangered Exhibit, BLM Learning
	Opportunities, Douglas County School Forestry Tour, Linking Girls to Land, Salmon
	Trout Enhancement Program, Youth Angling Enhancement Program, Aquatic and
	Angler Program, Free Fishing Days, Classroom Incubator Program, Tsalila Festival,
	Tsalila Spring, Eastwood Elementary, SCEP, STEP, USFS Online Activities, UNF
	Speakers Bureau, Greatest Good, ODNRA, RAP Camp, Natural Resource Education
	Program, ONRRI, Wolftree Watershed Ecology Program, Larch Mountain
	Environmental Ed Site, OMSI, Umpqua Discovery Center, Hinkle Creek Study,
	Salmon Watch, Fun at the Creek Camp, Glendale Watershed Symposium
Forestry	BLM Education Outreach, Diversity Endangered Exhibit, BLM Learning
	Opportunities, Douglas County School Forestry Tour, 4-H Youth Development, 4-H
	Youth Forestry Program, ACCF, Linking Girls to Land, Tsalila Festival, Tsalila
	Spring, Eastwood Elementary, Youth Wilderness Campout, Mildred Kanipe, SCEP,
	STEP, USFS Online Activities, UNF Speakers Bureau, Greatest Good, RAP Camp,
	Natural Resource Education Program, ONRRI, PLT, Talk About Trees, ORTOSA,
	Wolftree Watershed Ecology Program, Larch Mountain Environmental Ed Site,
	OFIT, Port Blakely Tree Farms, Science in the Forest, OMSI, Spring Visitation
	Program, Rediscovery Forest, Magness Memorial Tree Farm, Discovery Center at
	WFC, Johnson-Swanson Memorial Tree Farm, Hinkle Creek Study, BLM Electronic
~ 1	Field Trips
Geology	BLM Education Outreach, BLM Learning Opportunities, 4-H Youth Development,
	ACCF, Isalila Festival, Eastwood Elementary, Mildred Kanipe, SCEP, STEP, USFS
	Online Activities, Greatest Good, ODNRA, RAP Camp, ONRRI, Wolffree
	Watershed Ecology Program, OFI1, Science in the Forest, OMSI, BLM Electronic
Hazardous Waste Management	Healthy Homes, SCEP, STEP, PL1, BLM Electronic Field Trips
History/Culture	BLM Learning Opportunities, Isalia Festival, Greatest Good, ODNKA, KAP Camp,
	Conter at WEC, Claudele Wetershed Service action Oregon Garden, Discovery
Heating Physics	Center at wFC, Glendale watersned Symposium
Hunting Education	Oregon Hunter Education Course
Internship/Job Shadowing	SCEP, STEP, KAP Camp, Mission Zoopossible, Junior Zookeeper, Youth
Manitanina mumanina	Ambassador
wonttoring, surveying	Gilde Middle School Partnersnip, ACCF, Salmon Trout Ennancement Program,
equipment, data conection	I sama resuval, Eastwood Elementary, Youth wilderness Campoul, Mildred Kanipe,
	Activities DAD Comp. Natural Descures Education Dragrom, ONDRI, OPTOSA
	Welftree Wetershed Ecology Program Larch Mountain Environmental Ed Site
	OFIT Science in the Forest OMSI Environmental Education Oregon Carden
	Dediscovery Forest Hinkle Creek Study, Salmon Watch
Organic Gardening	Watershed Education Program Healthy Homes Glide Wildflower Show
Organic Gardening	Environmental Education Oragon Garden
Plant/Tree ID	BIM Learning Opportunities Douglas County School Forestry Tour 1 H Vouth
	Forestry Program ACCF Linking Girls to Land Tealila Festival Fastwood
	Flementary Youth Wilderness Campout Watershed Education Program SCED
	STEP USES Online Activities ODNRA RAP Camp Natural Resource Education
	Program ONRRI Talk About Trees ORTOSA Wolffree Watershed Ecology
	1 riogram, Orient, raik roout rices, OKTOSA, wontee watershed Leology

	Program, Jackson Bottom, Larch Mountain Environmental Ed Site, OFIT, Port
	Blakely Tree Farms, Science in the Forest, Glide Wildflower Show, Environmental
	Education Oregon Garden, Rediscovery Forest, Magness Memorial Tree Farm,
	Discovery Center at WFC, Johnson-Swanson Memorial Tree Farm, Hinkle Creek
	Study, Glendale Watershed Symposium
Recreation	BLM Learning Opportunities, ACCF, Linking Girls to Land, Youth Wilderness
	Campout UNF Speakers Bureau ODNRA RAP Camp ONRRI ORTOSA Larch
	Mountain Environmental Ed Site OFIT Port Blakely Tree Farms Science in the
	Forest Umpaus Discovery Center Environmental Education Oregon Carden
	Policication Discovery Center, Environmental Education Oregon Garden,
	Rediscovery Forest, Magness Memorial Tree Farm, Johnson-Swanson Memorial
	Tree Farm, Fun at the Creek Camp
Restoration	ACCF, Salmon Trout Enhancement Program, Tsalila Festival, Tsalila Spring,
	Eastwood Elementary, Mildred Kanipe, Watershed Education Program, Healthy
	Homes, SCEP, STEP, USFS Online Activities, UNF Speakers Bureau, Greatest
	Good, Natural Resource Education Program, ONRRI, ORTOSA, Jackson Bottom,
	Hinkle Creek Study
Soils	BLM Education Outreach, BLM Learning Opportunities, ACCF, Tsalila Festival.
50115	Fastwood Elementary Mildred Kanine Watershed Education Program Healthy
	Homes SCED STED USES Online Activities Greatest Good ODNDA DAD Comp
	Netural Decourses Education Dragram ONDDI ODTOSA, Walteres Watershed
	Natural Resource Education Program, ONRRI, ORTOSA, Wonnee Watersneu
	Ecology Program, Larch Mountain Environmental Ed Site, OFIT, Science in the
	Forest, OMSI, Glide Wildflower Show, Environmental Education Oregon Garden,
	Magness Memorial Tree Farm, Johnson-Swanson Memorial Tree Farm, Hinkle
	Creek Study, Glendale Watershed Symposium
Technology/GPS/GIS	BLM Learning Opportunities, Glide Middle School Partnership, ACCF, Salmon
	Trout Enhancement Program, Mildred Kanipe, Watershed Education Program,
	SCEP. STEP. RAP Camp. Natural Resource Education Program, ONRRI, ORTOSA.
	Science in the Forest OMSI Hinkle Creek Study Glendale Watershed Symposium
Watershed/Aquatic/Riparian	BLM Education Outreach BLM Learning Opportunities Glide Middle School
watershea/Aquatic/Atiparian	Derthership A H Vouth Forestry Program ACCE Linking Girls to Land Salmon
	Trautership, 4-11 Fouri Forestry Hograni, Actor, Eliking Olits to Edit, Sainton
	Thou Eminancement Program, Aquatic and Angler Program, Classicolin incubator
	Program, Isalila Festival, Isalila Spring, Youth Wilderness Campout, Mildred
	Kanipe, Healthy Homes, SCEP, STEP, USFS Online Activities, UNF Speakers
	Bureau, Greatest Good, ODNRA, RAP Camp, Natural Resource Education Program,
	ONRRI, PLT, ORTOSA, Wolftree Watershed Ecology Program, Jackson Bottom,
	Larch Mountain Environmental Ed Site, OMSI, Umpqua Discovery Center,
	Environmental Education Oregon Garden, Rediscovery Forest, Hinkle Creek Study,
	Salmon Watch, Fun at the Creek Camp, Glendale Watershed Symposium
Wildlife/Animal Science	BLM Education Outreach, Diversity Endangered Exhibit, BLM Learning
	Opportunities Douglas County School Forestry Tour 4-H Youth Development 4-H
	Vouth Forestry Program ACCF Linking Girls to Land Tsalila Festival Fastwood
	Elementary Vouth Wilderness Composite Mildred Vanine, Watershed Education
	Dreament SCED STED LISES Online Activities Createst Cool ODNDA DAD
	Program, SCEP, STEP, USFS Unline Activities, Greatest Good, UDINKA, KAP
	Camp, Natural Resource Education Program, ONRRI, PL1, ORTOSA, Wolffree
	Watershed Ecology Program, Jackson Bottom, Larch Mountain Environmental Ed
	Site, OFIT, Port Blakely Tree Farms, Science in the Forest, OMSI, Umpqua
	Discovery Center, Environmental Education Oregon Garden, Rediscovery Forest,
	BLM Electronic Field Trips
Zoological	Adaptation Camp, Conservation Camp, Animal Outreach, Noon Visits, Which is
	Which, Wild, Candid Conservation, Simply Science, Zoo View, Mission
	Zoopossible Junior Zookeeper Youth Ambassador

Appendix F:

Educator Survey Data

1. Which of the following subjects are offered in your classes at your school? (Choose all that apply)

	Response Percent	Response Total
Forestry	61.9%	13
Wildlife	52.4%	11
Fisheries	42.9%	9
Archaeology	4.8%	1
Energy/Minerals	23.8%	5
Soils/Geological Resources	33.3%	7
Mapping/Technology	14.3%	3
Fire	19.0%	4
Entomology	28.6%	6
Engineering	9.5%	2
Other: Introduction to Resource Management (1),	47.6%	10
Environmental Science (4), Botany/Biology (1), Earth Science		
(1), Hydrology (1), Ecology (2), and Ethnobotany (1)		

2. What classes that are not currently offered would you like to see taught at your school that involves natural resources or science?

	Response	Response Total
	Percent	
None	23.8%	5
Use of GIS Technology/Mapping	9.5%	2
Geology	9.5%	2
Plant Propagation	4.8%	1
Water Quality	4.8%	1
Forestry	14.3%	3
Soils	4.8%	1
Wildlife Biology	4.8%	1
Fisheries	14.3%	3
Natural Resources	4.8%	1
Environmental Science	4.8%	1
Entomology	9.5%	2
Fire	14.3%	3
Engineering	4.8%	1
Energy/Mineral	4.8%	1
Archaeology	4.8%	1
Integration of math into science classes	4.8%	1

3. What programs or direction is coming from the State level that would require a different emphasis on natural resources or science in your curriculum? *16 respondents answered this question and 5 skipped it.*

	Response Percent	Response Total
None	37.5%	6

Unaware	25%	4
"We are OK from a State level perspective; these are just	6.3%	1
courses I would like to develop to expand the offerings to		
the students."		
"Both Oregon and Federal (No Child Left Behind Act)	6.3%	1
pressures are on to teach toward standardized tests. As a		
result, hands-on field work, research, integrated science,		
and vocational approaches all take an extra-ordinary effort		
to keep from getting short shrift."		
САМ	6.3%	1
"State standards have not been overhauled for several	6.3%	1
yearsso no new emphasis"		
"Schools do not receive direction that requires a different	6.3%	1
emphasis on natural resources. We teach what is accepted		
in the field of science not what is viewed as "natural		
resources" by the USFS."		
"Stronger focus on inquiry-based activities."	6.3%	1

4. Does your school offer any of the following natural resource related activities for students or teachers? (Check all that apply)

	Teacher/Student Directed	Staff Directed	Contractor/Partner Directed	Volunteer Directed	Respondent Total
Site-based outdoors	68% (13)	21% (4)	26% (5)	32% (6)	19
Site-based indoors	85% (11)	23% (3)	8% (1)	8% (1)	13
Classroom visits by guest speakers	72% (13)	39% (7)	6% (1)	17% (3)	18
Internships	43% (3)	43% (3)	71% (5)	14% (1)	7
Field school/research	64% (7)	27% (3)	18% (2)	18% (2)	11
Teacher workshops	33% (3)	44% (4)	56% (5)	0% (0)	9
Field trips	94% (17)	17% (3)	11% (2)	22% (4)	18
				Total Respondents	21

5. Please add any additional activities that are not listed. 19 respondents skipped this question and 2 answered.

- "We are attempting to add "certifications" for entry level resource management skills, for example, chain saw certification and fire crew training, noxious/invasive weed identification, etc."
- "Environmental Knowledge competition environthon Directed by Canon and Marion County Soil and Water Conservation District"

6. Do any of the above activities or programs have a fee for students? If so which ones? *1 respondent skipped this question.*

	Response Percent	Response Total
Yes	20%	4
No	75%	15
Other: Bus fee that is a problem for scheduling (1); Fees	25%	5
for lunch (1); Snowshoe Field Trip Envirothon - covered		
by Marion County SWCD (1); Field trips (2),		
Internships (1), and Teacher Workshops (1).		

7. What conservation education efforts would you like to have done in your school that is not currently being done? *18 respondents answered this question and 3 skipped it.*

	Response Percent	Response Total
Extracurricular Activities	33.3%	6
Field Trips	50%	9
Guest Speakers/Presentations	55.6%	10
Outdoor Classroom Activities	66.7%	12
Other: Partnerships with natural resource agencies for	16.7%	3
students to learn protocols to assist in resource work, studies		
(1); Better teacher prep (1); assistance with all of the above		
with instruction, transportation, and field equipment (1).		

8. Have you or any other teachers at your school participated in

17 respondents answered this question and 4 skipped it.

	Response Percent	Response Total
Project Learning Tree	70.6%	12
Oregon Forest Institute for Teachers Workshop	29.4%	5
Oregon Teachers on Summer Assignment	11.8%	2
Other: outdoor science schools for 12 years and have	41.2%	7
lead many workshops (1); Summer Institute at OSU for		
Scientific Inquiry (1); Doesn't know (1); None (1); Not		
Interested in these programs (1); BLM Virtual Tour		
Websites (1); Teacher missed (1)		

9. Are you familiar with the Student Career Experience Program (SCEP) or Student Training Experience Program (STEP) offered by the federal government that is available to high school and college students?

	Response Percent	Response Total
Yes	28.6%	6
No	81%	17

10. Is there information about the Student Career Experience Program (SCEP) or Student Training Experience Program (STEP) offered by the federal government readily available to students? *19 respondents answered this question and 2 skipped it.*

	Response Percent	Response Total
Yes	21.1%	4

No	78.9%	15

11. Would you like it available? 20 respondents answered this question and 1 skipped it.

	Response Percent	Response Total
Yes	100%	20
No	0	0

12. What is the best way to make this information available to students? 20 respondents answered this question and 1skipped it.

	Response Percent	Response Total
Counselors/academic advisors	50%	10
Email	45%	9
Flyers posted throughout school	50%	10
Other: Teacher (3); guest speakers (2);	45%	9
unsure (2); daily announcements (1); and		
news articles targeting parents (1)		

13. Would an Environmental Education Resource Directory of all the various conservation education opportunities available to students and teachers in Douglas County be a useful tool in helping you implement more conservation education into your curriculum?

	Response Percent	Response Total
Yes	100%	21
No	9.5%	2

14. Would you prefer a paper copy or an electronic copy?

	Response Percent	Response Total
Paper copy	47.6%	10
Electronic copy	71.4%	15

15. How would you like the Forest Service to be more involved in your school? 19 respondents answered this question and 2 skipped it.

	Response Percent	Response Total
Conduct outdoor field studies	36.8%	7
Guest speakers	31.6%	6
Provide resources and funding: help transport students to field sites and help with purchase or use of field equipment such as binoculars, water quality equipment, compasses, measuring tapes, rain ponchos, & field guides	15.8%	3
Directory of close public lands that are easy to get to, lacking or almost lacking poison oak with a habitat variety for students for outdoor fieldwork	5.2%	1

Continued participation in the Watershed	5.2%	1
Involvement is fine	10.5%	2
Aid teachers in knowing what is available and making contact.	10.5%	2
Volunteer activities	5.2%	1
Research	5.2%	1
Career awareness and preparation through info, curriculum, job shadows, projects, & internships.	5.2%	1
Indoor programs that provide curriculum and guidance while meeting state standards.	21.1%	4
Short term and Long term Summer Workshops, especially for teachers	5.2%	1
Support our efforts through making specialists in the hard core science areas such as hydrology, fisheries, botany and wildlife available for more project based inquiry science.	5.2%	1

16. What are the best ways to implement conservation education into your curriculum while meeting state educational standards? *16 participants answered this question and 5 skipped it.*

	Percent Response	Percent Total
The best way is to offer a class that deals	6.3%	1
with conservation education that is NOT		
the regular biology class. Some of the		
education standards can be met by the		
conservation education class, with the		
remainder done in the biology classes.		
Elective courses	12.5%	2
Integration into existing science	18.8%	3
classes		
As part of the regular classroom	6.3%	1
Offer a science course that is integrated	6.3%	1
with 1 required and 1 elective credit		
running concurrently with the ability to		
block extended periods of time. Offering		
this within a stand-alone program is		
possible - a sort of school-within-a-		
school.		
Outdoor activities that meet	18.8%	3
standards.		
Have an Environmental Studies class	6.3%	1
with required field trips.		
Guest speakers for classroom	12.5%	2
Supplemental material for the classroom;		3
easy to follow and complete curriculum		
that is easily available to teachers and		
planned activities		
Project based learning	6.3%	1

17. What are your visions of the future in regards to conservation education and where would you like your school to be in five years? *18 respondents answered this question and 3 skipped it.*

	Response Percent	Response Total
The conservation education class is one that is considered	5.6%	1
important enough that teachers, administrators, and the		
community will push to keep such a class a permanent part of the		
high school curriculum.		
Utilize Alder Creek Children's Forest for active research,	11.1%	2
learning tool, and be fully involved in management of the		
facility		
Students connect with nature and gain a greater respect and	11.1%	2
humble understanding of its complexity and the need to		
protect it. With this, they will both learn and apply the most		
current science free from bias for long term retention.		
A solid Environmental Studies class offered.	5.6%	1
A school that recycles actively, takes care of the grounds	11.1%	2
(without groundskeeper), students are aware of the native vs.		
exotic species, recycles food waste and composts actively, etc.		
Each grade level to do a science based field trip at least once a	22.2%	4
year and increase outdoor activities.		
Students work in ongoing programs with a development of	16.7%	3
relationships between teacher and forest service and other		
agencies. Also, offer transitions activities in partnership with		
resource agencies that help students prepare for post-		
secondary education and employment offerings in the fields.	5 (0)	1
Kids involved in energy/resource conservation efforts in school	5.6%	1
buildings - Green School sorts of things though not necessarily		
that model.	5 (0)	1
Continue to add to resources in conservation education.	5.6%	1
Offer Natural Resource Systems, a core program in resource	5.6%	1
sciences to 30 students.		
Still planning.	5.6%	1
We have fewer options than in the past due to funding decreases	5.6%	1
and emphasis on core curriculum for science students.		

18. Please add any additional comments or concerns you feel are important for the assessment of this survey. *6 respondents answered this question and 15 skipped it.*

- "I really feel strongly about the fact that conservation education is important for Oregon students. Our state has been a leader in making streams and fish, for instance, a priority. If conservation education is not stressed in our high schools, the future for the most beautiful parts of our state is in jeopardy. Just saying that we need to attach it to the biology class will not be enough in some schools. Some biology teachers will give it enough emphasis, but I feel that many will not. A separate class or after school outdoor club is the type of thing that works best. Conservation education is the emphasis for these types of groups, it is not an afterthought."
- "I think you should also contact Mark Hopfer, Days Creek Vo-Ag instructor, and Scott Hampton, Days Creek Science instructor, if you have not already done so."

- "We are beginning a lot of planning for next year to move in the directions mentioned above. Any current help in planning or awareness of possibilities would be greatly appreciated."
- "It is difficult to get school buy in for field trips. I have not received the support from my school that I need to run this program."
- "I do not think a directory is needed. This would be a waste of taxpayers' money."
- None

Appendix G:

Student Survey Data

1. Are you familiar with the term Natural Resources and/or careers related to Natural Resources?

	Response Percent	Response Total
Yes	55.1%	140
No	40.2%	102
Unsure	1.6%	4
No Answer (N/A)	3.1%	8

If yes, what topics/careers in Natural Resources interest you?

	Response Percent	Response Total
Oil/Gas	1.2%	3
Water Quality/Hydrology	1.6%	4
None	11.4%	29
N/A	3.5%	9
Wood/Timber	2.4%	6
Wildlife Biology/Management	5.1%	13
Metal	0.4%	1
Preserve Environment	0.8%	2
Fisheries	2.8%	7
Botany/Horticulture	0.8%	2
Wild land Fire Fighter/Fire Prevention	1.2%	3
Zoology/Wildlife Safari	1.6%	4
Land Management and Agencies	3.2%	8
Marine Biology	1.2%	3
Ecology	0.4%	1
Ranching	0.4%	1
Veterinary/Animal Research	0.8%	2
Equipment Operator	0.4%	1
Surveying	0.4%	1
All	0.4%	1
Park Ranger	0.4%	1
Hunting	1.2%	3
Hiking	1.2%	3
Unsure	2%	5
Energy Depletion	0.4%	1
Forestry	5.2%	13
Environmental Quality	0.4%	1
Farming/Livestock/Agriculture	2.4%	6
Logging	2%	5
DFPA	0.4%	1
Wilderness	0.4%	1
Recycling	0.4%	1
Archaeology	0.4%	1
Natural Resource Class	0.4%	1

Camping	0.4%	1
Paintball	0.4%	1

If no, why are you not interested in Natural Resources?

	Response Percent	Response Total
Not familiar with the term	26%	66
Have other interests	50%	127
Unsure	0.4%	1

2. What are your school-related interests and/or subjects?

	Response Percent	Response Total
Girls	0.8%	2
Any Subject	0.4%	1
Family Planning	0.4%	1
Accounting	0.8%	2
Business	0.4%	1
Engineering	0.4%	1
Unsure	2%	5
Sociology	0.8%	2
Yearbook	1.2%	3
Computers	1.2%	3
Science	26%	66
Wellness/Home Economics	1.6%	4
РЕ	9.8%	25
Weight Training	1.6%	4
Rodeo	0.4%	1
JROTC	0.4%	1
Law Enforcement	0.4%	1
Government	1.2%	3
N/A	2.4%	6
3D Animation	0.4%	1
Modeling	0.4%	1
Visual Entertainment/Graphic Design/Film	2.4%	6
Sports	19.7%	50
Wood Working	1.2%	3
Automotive	2%	5
Culinary Arts	1.2%	3
Math	15.7%	40
Leadership	0.8%	2
English	9.4%	24
History	5.1%	13
Economics	0.8%	2
Psychology	1.6%	4
Choir	0.8%	2
Drama/Theater	4.3%	11
Band	2%	5
Forestry	2.4%	6
Marketing	0.8%	2
Writing/Journalism	3.1%	8
Music	3.5%	9

Child Development	2%	5
None	3.5%	9
Literature/Reading	2.8%	7
Medical	3.1%	8
Welding/Shop	6.3%	16
Foreign Language	3.1%	8
Photography	1.6%	4
Drafting	1.2%	3
HTR	0.4%	1
FCCLA	0.4%	1
Agriculture/FFA	5.1%	13
Speech	0.4%	1
Fish Hatchery	0.4%	1
Health	2%	5
Art	5.1%	13
Social Studies	1.2%	3
Study Hall	0.4%	1
Geography	0.8%	2
ECA	0.4%	1
Student Council	0.8%	2
Chess	0.4%	1
Soils	0.4%	1
Recess	0.8%	2
Dawn Patrol	0.4%	1
Lunch	1.2%	3
OYCC	0.4%	1
National Honor Society	1.2%	3
Nursing	0.4%	1
Doesn't Like School	0.4%	1

3. What subjects are not currently being taught at your school that you wish were being taught?

	Response Percent	Response Total
Psychology	1.2%	3
Music Theory/More Music	1.2%	3
Piano	0.4%	1
Cartooning	0.4%	1
Photography	4%	10
Food Class/Home Economics	6%	15
None	14.2%	36
Guitar	0.8%	2
Sports Related Period/Weight Lifting	1.6%	4
Fashion/Clothing Design	1.2%	3
Yoga	2%	5
Dance Team	1.2%	3
Study Hall	0.4%	1
Sign Language	1.2%	3
Radiology	0.4%	1
Costume Design/Makeup	0.8%	2
Creative Writing	0.8%	2
Snowboarding	0.8%	2
Other Foreign Languages	7.5%	19
Advanced College Courses	0.4%	1

Diesel Program	0.4%	1
Unsure	6.3%	16
Geology	2%	5
Basketball	0.4%	1
Scuba Diving	0.4%	1
Interior Design	1.2%	3
N/A	11.4%	29
Horse Riding	0.4%	1
Botany	0.4%	1
Zoology	2%	5
Law Enforcement	1.2%	3
Philosophy	1.2%	3
Sociology	0.4%	1
Anatomy	0.8%	2
Human Relations	0.4%	1
Advanced Ag Mechanics	4.7%	12
Astrology	1.6%	4
Archery	0.8%	2
Journalism/Newspaper	1.2%	3
Wildlife	1.6%	4
Algebra	0.4%	1
Classes not so strict	0.4%	1
Advanced Art	6.7%	17
Shop	3.5%	9
Career Class	0.8%	2
Computer Programming/Building	2%	5
Leadership	0.8%	2
Gymnastics	0.4%	1
Science for needy kids	0.4%	1
Video Game Design	0.4%	1
Full vear of PE	0.4%	1
Drama	0.8%	2
More Variety	0.4%	1
Outdoor education	0.8%	2
Engineering	0.4%	1
Flight	0.4%	1
Choir	0.4%	1
Band	0.8%	2
Sales/Business	0.4%	1
EMT	0.4%	1
National Guard	0.4%	1
Soccer	0.8%	2
Dungeons and Dragons	0.4%	1
Online courses	0.4%	1
More electives	1.2%	3
More Science	2.8%	7
Softball	0.4%	1
Cheerleading	0.4%	1
Geography	0.4%	1
Oceanography	0.4%	1
Anthropology	0.4%	1
Counseling	0.4%	1
Biblical Studies	0.4%	1

Recreation	0.4%	1
Health	0.4%	1
Architecture	0.4%	1
Contracting	0.4%	1
Jewelry	0.4%	1

4. Are you interested in information about careers/internships in Natural Resources offered by the Forest Service, Bureau of Land Management, or other agencies/organizations?

	Response Percent	Response Total
Yes	34.3%	87
No	52.8%	134
Unsure	4.4%	11
N/A	2.4%	6

5. If yes, what is the best way to get this information to you?

	Response Percent	Response Total
Academic Advisor	21.8%	19
Guest Speaker	58.6%	51
Flyers Posted Throughout School	25.3%	22
Assembly or Job/Intern Fair	56.3%	49
Other: Contact students directly, mail information to	19.5%	17
students, email students, classroom shadowing		
program, Educational Talent Search Program, and		
National Guard visits		

Appendix H:

1. Liaison work:

- Point of Contact:
 - 1. Continue contact with school administrators, teachers, and students to keep a strong relationship between the schools and the agency.
 - 2. Send out notices of educational opportunities, grants, teacher workshops, and other opportunities.
 - 3. Actively participate in Forest Service affiliated educational programs such as the Alder Creek Children's Forest Spring Fair or Fall Forum, the Glendale Regional Watershed Science Symposium, or the Douglas County School Forestry Tour.
 - 4. Estimated amount of time to complete duties: 200 hours
- Update EERD:
 - 1. Contact each program in the directory to make sure the program is still offered and update any changes in logistics.
 - 2. Research new opportunities that need to be included in the directory including opportunities to Lane County schools. Update the changes on the FS website and the ESD website.
 - 3. Make changes to state educational standards and benchmarks if necessary.
 - 4. Contact Curriculum Developer at the ESD so new CD's can be mailed to all educators.
 - 5. Estimated amount of time to complete duties: 100 hours.
- Coordinate Fieldtrips:
 - 1. Forest Service employees on all districts assist in two field days a year with students from Douglas and Lane County schools.
 - 2. The agency gives a deadline for schools to sign up for the field day, and the field day will be based on first-come first-serve.
 - 3. Each district will decide on a location for the field day, and there will be a site on all five districts.
 - 4. Liaison coordinates with specific classes and tailors the field day to the specifications the teacher would like the class to learn and the Forest Service Learner Guidelines. The Forest Service Learner Guidelines serve as a tool for designing and presentation of Forest Service conservation education activities, programs, and products. Incorporating the guidelines into conservation education programs will increase the quality and effectiveness of conservation education efforts. The guidelines can be found on the following website: http://www.na.fs.fed.us/spfo/ce/content/program_providers/tools/learner_guideline_s.pdf
 - 5. Send out a bulletin to all Douglas and Lane County schools with information about signing up, logistics, and a description of the field trips.
 - 6. Resources will be provided by the agency. Refer to the Resources segment below.
 - 7. Estimated amount of time to complete duties: 300 hours

- Collaborate with others for student fair: Contact Kate Emerson, Recruiter, at the Umpqua Community College and Patty Emerson at the Employment Department to coordinate a high school student fair. Estimated amount of time to complete duties: 100 hours. (Refer to Appendix J, Suggestions for Planning an Opportunities Fair, on page 75 for more thorough planning suggestions.)
- Provide education and outreach to the public: Employees should refer to The USDA Forest Service Interim Strategic Public Outreach Plan for guidelines in providing public outreach. The plan describes how the Forest Service builds a corporate approach and corporate systems to facilitate outreach as a routine part of the agency's day-to-day operations. Employees in all parts and levels of the agency will be involved in carrying out the actions outlined in this plan, and more people, representing the diversity of the Nation, will learn along with us and hopefully see how agency programs and services are relevant to them and to the issues they care about where they live, work, and play. The consequences of not acting are significant, including loss of public support. The document can be found on the link below.

http://www.fs.fed.us/cr/national_programs/correspondence/spop/fsspop.pdf

Estimated amount of time to complete duties: 200 hours

2. Promote the STEP and SCEP:

- Coordinate with Mary Marrs to promote the STEP and SCEP to high school and college students.
- Send out information to all high schools in Douglas County, the Wolf Creek Job Corps, Umpqua Community College, other colleges throughout the state, Douglas County Employment Department, Oregon Employment Department; put information on the website, and post updates on USA Jobs website.
- Actively recruit students by participating in job fairs throughout the state or presenting information to schools.
- Start recruiting students in November because application deadlines are in February.
- Estimated amount of time to complete duties: 50 hours

3. Volunteer Coordinator Recruit Student Volunteers for Youth Service Projects:

- Recruit students for youth service projects such as Global and National Youth Service Day, National Trails Day, National Make-A-Difference-Day, and Martin Luther King Day of Service.
- Coordinate the events involving agency partners, media, public officials, community members, and youth. (Refer to Appendix K, Tips for Planning a National Youth Service Day Event, on page 77)
- Involve employees from all the districts to generate ideas for the youth projects that will benefit the youth and the agency.
- Provide incentives for students to get involved such as transportation, free lunch, or thankyou gifts such as t-shirts, pins, or key chains.
- Estimated amount of time to complete duties: 200 hours

4. Resources:

- The agency provides field equipment and possibly transportation if needed for field days.
- Employees collaborate with schools, Education Service District, Bureau of Land Management, other agencies, and non-profit organizations that can provide presenters for field days, equipment, or other needed resources.
- Liaison or Volunteer Coordinator can write for grants for more funding for resources.

5. Employee-Buy in:

- Emily Molter will develop a presentation with information to present to the Forest Leadership Team about recommendations listed in the assessment.
- The FLT can work with Emily to develop ideas on getting employee-buy in for the conservation education framework.

6. Provide Technical Training to Students:

- Technical training can be provided during the field days mentioned above. The field days can be designed to incorporate technical training using field equipment that is used in professional careers.
- Employees should allow students to accompany them in the field for job shadowing experience. Students will see how employees use field equipment, apply theories in the field, and gain a basic understanding of the job duties of Forest Service employees.
- Estimated amount of time to complete duties: 50 hours

Estimated Total Hours/Days: 1200 hours/150 days

Appendix I:

Sample page of Environmental Education Resource Directory

Rediscovery Fore	est Education Program
Description:	The Rediscovery Forest is a demonstration forest that gives students hands-on opportunities to engage in activities involving tree biology, wildlife habitat, plant identification and forest ecology and management in the Oregon Garden Rediscovery Forest. A wide range of forestry topics are available to meet individual classroom needs. The forestry program is structured to meet Oregon Department of Education benchmarks and content standards
Program Offered By:	Oregon Forest Resources Institute (non-profit)
Contact Information:	Julie Woodward 503-584-7259 woodward@ofri.com http://www.oregongarden.org/index.html
Location:	Silverton, OR
Target Audience:	K-12 students, home groups, etc.
Group Size:	Varies depending on class
Program activities:	Hands-on learning, outdoor activities, field trip
Cost:	OFRI covers the program cost, admission to the Garden, and transportation costs. Participants must submit a request form and an additional transportation reimbursement form. After a review of applications, participants will be contacted with details of their trip.
Transportation:	Participants may be reimbursed for their travel. Participants must submit a transportation reimbursement form.
Length of time:	Varies depending on program
Pre or Post Preparation work:	Teachers need to register for a program and make travel arrangements.
Number of times presented/yr:	Open all year except holidays
Partners:	The Oregon Garden, Chemeketa

Possible Connections to Third Grade Standards:non-profits, and municipalitiesPossible Connections to Third Grade Standards:E.03.1.C.1(1) Read regular words with several syllables.E.03.1.C.1(6) Read or demonstrate progress toward reading at an independent and instructional reading level appropriate to grade level.E.03.1 D 1(1) Shill Ta Sumport the
Possible Connections to Third Grade Standards:E.03.1.C.1(1) Read regular words with several syllables.E.03.1.C.1(6) Read or demonstrate progress toward reading at an independent and instructional reading level appropriate to grade level.E.03.1.D.1(1) Shill To Sumport the
Standards:several syllables.E.03.1.C.1(6) Read or demonstrate progress toward reading at an independent and instructional reading level appropriate to grade level.E.02.1 D.1(1) Shill To Sumport the
E.03.1.C.1(6) Read or demonstrate progress toward reading at an independent and instructional reading level appropriate to grade level.
progress toward reading at an independent and instructional reading level appropriate to grade level.
and instructional reading level appropriate to grade level.
to grade level.
$\mathbf{F} \mathbf{A} 2 1 \mathbf{D} 1 1 1 1 1 1 \mathbf{T}_{\alpha} \mathbf{C}_{\alpha \alpha \alpha} = \mathcal{A} \mathbf{A}_{\alpha \alpha} 1$
E.US.I.D.I(I) Skill 10 Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Listen to, read, and
understand a wide variety of grade-level
informational and narrative (story) text
including children's magazines and
newspapers, dictionaries, other reference
contemporary literature and postry
E 03 1 D 1 (4) Skill To Support the
Standard: (For the nurnose of noting key
skills that support classroom instruction of
the standards) Point to or clearly identify
specific words or wordings that are causing
comprehension difficulties and use
strategies to correct.
E.03.1.D.1(5) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Read longer selections and
books independently.
E.03.1.E.1(1) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Understand, learn, and use
new vocabulary that is introduced and
taught directly through orally-read stories
and informational text as well as student-
read stories and informational text.
E.03.1.F.1(1) Read written directions,
signs, captions, warning labels, and
Informational books. $\mathbf{E} = \mathbf{A}^2 + \mathbf{E} + \mathbf{A}^2$
E.U.S.I.F.I(3) Interpret Information from
unagranis, charts, and graphs. E 03 1 C 1 (4) Summarize major points
E.US.I.G.I(4) Summarize major points from informational text
F 03 1 H 1(3) Ask how why and what if

questions in interpreting informational
texts.
E.03.3.A.1(2) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Discuss ideas for writing
use diagrams and charts to develop ideas
and make a list or notebook of ideas
E.03.3.A.1(3) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) With some guidance use all
aspects of the writing process (e.g.
aspects of the writing process (c.g.,
aditing) in producing compositions and
compositions and
$E_{0} = 2 + 1(7) = 2 + 1 = 2$
L.US.S.A.I (<i>1</i>) SKIII 10 Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Present and discuss own
writing with other students, and respond
helpfully to other students' compositions.
E.03.3.B.1(1) Write appropriately for
purpose and audience.
E.03.3.B.1(2) Create a single paragraph
with a topic sentence, simple supporting
facts and details, and a concluding
sentence.
E.03.3.B.1(3) Use vivid adjectives and
action verbs.
E.03.3.B.1(5) Write correctly complete
sentences of statement, command, question
or exclamation.
E.03.3.C.1(7) Notice when words are not
correct, and use a variety of strategies to
correct (e.g., word lists, dictionary).
E.03.3.D.1(1) Use subjects and verbs that
are in agreement (we are instead of we is).
E.03.3.G.1(1) Write legibly in cursive and
manuscript, leaving space between letters
in a word, words in a sentence, and
between words and the edges of the paper
E.03.3.H.1(1) Personal Narrative
SC 03 2 A $1(1)$ Recognize characteristics
that are similar and different between
organisms
organisms.

	SC.03.2.A.1(2) Describe the basic needs of
	living things.
	SC.03.2.B.1(1) Describe how related plants
	and animals have similar characteristics.
	SC.03.2.C.1(1) Describe a habitat and the
	organisms that live there.
	SC.03.2.C.1(2) Identify how some animals
	gather and store food, defend themselves,
	and find shelter.
	SC.03.3.A.1(1) Recognize physical
	differences in Earth materials.
	SC.03.3.A.2(1) Identify daily and seasonal
	weather changes.
	SC.03.4.A.1(1) Make observations. Based
	on these observations, ask questions or
	form hypotheses, which can be explored
	through simple investigations.
	SC.03.4.B.1(1) Plan a simple investigation.
	SC.03.4.C.1(1) Collect data from an
	investigation.
	SC.03.4.D.1(1) Use the data collected from
	an investigation to explain the results.
	SS.03.3.0.4(1) Identify physical
	characteristics of places and compare them.
	SS.03.4.A.1(1) Understand calendar time
	sequences and chronological sequences
	within narratives.
	SS.03.4.D.2(1) Understand events from
	local history.
	SS.03.5.0.1(1) Identify an issue or problem
	that can be studied.
	SS.03.5.0.2(1) Gather information relating
	to an issue or problem.
	SS.03.5.0.3(1) Identify and compare
	different ways of looking at an event, issue,
	or problem.
	SS.03.5.0.4(1) Identify how people or other
	living things might be affected by an event,
	issue, or problem.
	SS.03.5.0.5(1) Identify possible options or
	responses; then make a choice or express
	an opinion.
Possible Connections to Fifth Grade	E.05.1.C.1(2) Read or demonstrate
Standards:	progress toward reading at an independent
	and instructional reading level appropriate
	to grade level.

E.05.1.D.1(1) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Listen to, read, and
understand a wide variety of informational
and narrative text, including classic and
contemporary literature, poetry, magazines,
newspapers, reference materials, and online
information.
E.05.1.D.1(6) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Clearly identify specific
words or wordings that are causing
comprehension difficulties and use
strategies to correct.
E.05.1.E.1(1) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Understand, learn, and use
new vocabulary that is introduced and
taught directly through informational text,
interary text, and instruction across the
subject areas. E $0.5 \pm 1.1 \pm 1.1$ D and touthonly a biographical
ekotehoa lottora diarioa directiona
sketches, letters, dialles, directions,
almanacs
F 05 1 F 1(4) Follow multiple-step
directions (e.g. for completing an
experiment or an activity or for using a
product).
E.05.3.A.1(1) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Use a variety of strategies to
prepare for writing, such as brainstorming,
making lists, mapping, outlining, grouping
related ideas, using graphic organizers, and
taking notes.
E.05.3.A.1(2) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Discuss ideas for writing
with classmates, teachers, and other
writers, and develop drafts alone and

collaboratively
E 05.2 A $1(4)$ Shill To Summart the
E.U.S.S.A.1(4) SKIII 10 Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Choose the form of writing
that best suits the intended purpose-
personal letter, letter to the editor, review,
poem, report, or narrative.
E.05.3.A.1(9) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Edit and proofread one's
own writing as well as that of others using
the writing conventions and for example
an aditing abacklist or list of rules with
an eutling checklist of list of rules with
specific examples of corrections of specific
errors.
E.05.3.B.1(6) To achieve clarity of
meaning and to enhance flow and rhythm,
correctly use prepositional phrases,
appositives, main clauses, and subordinate
clauses.
E.05.3.D.1(3) Ensure that verbs agree with
their subjects.
E.05.3.G.1(1) Write legibly in cursive or
manuscript.
E.05.3.H.1(1) Personal Narrative
SC.05.2.A.1(1) Group or classify
organisms based on a variety of
characteristics.
SC.05.2.A.1(2) Classify a variety of living
things into groups using various
characteristics
SC 05.2 \wedge 1(5) Describe basic plant and
animal structures and their functions
animal structures and their functions. SC 05.2 A $1(6)$ Associate specific
structures with their functions in the
subclutes with their functions in the
survival of the organism.
SC.05.2.B.1(1) Describe the life cycle of
an organism.
SC.05.2.C.1(1) Describe the relationship
between characteristics of specific habitats
and the organisms that live there.
SC.05.2.C.1(3) Identify the producers,
consumers, and decomposers in a given
habitat.

SC.05.2.C.1(4) Recognize how all animals
depend upon plants whether or not they eat
the plants directly.
SC.05.2.C.1(5) Explain the relationship
between animal behavior and species
survival.
SC.05.2.C.1(6) Describe the living and
nonliving resources in a specific habitat
and the adaptations of organisms to that
habitat.
SC.05.2.C.1(9) Identify conditions that
might cause a species to become
endangered or extinct.
SC.05.3.A.1(1) Identify properties and uses
of Earth materials.
SC.05.3.A.1(3) Recognize that soils vary in
color, texture, components, reaction to
water, and ability to support the growth of
plants. $SC(05, 2, 4, 2(1))$ Depending a statement of
SC.05.5.A.2(1) Describe patterns of
seasonal weather.
SC.05.3.A.2(5) Identify effects of wind and
models
SC 05 4 A 1(1) Make observations Ask
questions or form hypotheses based on
those observations, which can be explored
through scientific investigations
SC 05 4 B $1(1)$ Design a simple scientific
investigation to answer questions or test
hypotheses
SC.05.4.C.1(1) Collect. organize. and
summarize data from investigations.
SC.05.4.D.1(1) Summarize, analyze, and
interpret data from investigations.
SS.05.3.0.6(1) Identify patterns of
migration and cultural interaction in the
United States.
SS.05.3.0.6(2) Understand how physical
geography affects the routes, flow, and
destinations of migration.
SS.05.3.0.6(3) Explain how migrations
affect the culture of emigrants and native
populations.
SS.05.3.0.8(1) Understand how physical
environments are affected by human

	activities.
	SS.05.3.0.8(2) Understand how and why
	people alter the physical environment
	SS.05.3.0.8(3) Describe how human
	activity can impact the environment
	SS.05.3.0.8(6) Understand how the
	physical environment presents
	opportunities for economic and recreational
	activity.
	SS.05.4.A.2(1) Identify cause and effect
	relationships in a sequence of events.
	SS.05.4.A.3(1) Understand how history can
	be organized using themes, geography, or
	chronology.
	SS.05.4.C.1(3) Understand the impact of
	early European exploration on Native
	Americans and on the land.
	SS.05.4.D.1(1) Understand how individuals
	changed or significantly influenced the
	course of Oregon state history.
	SS.05.4.D.2(1) Understand how individuals
	changed or significantly influenced the
	course of local history.
	SS.05.5.0.1(1) Examine an event, issue, or
	problem through inquiry and research.
	SS.05.5.0.3(1) Identify and study two or
	more points of view of an event, issue, or
	problem.
	SS.05.5.0.4(1) Identify characteristics of an
	event, issue, or problem, suggesting
	possible causes and results.
	SS.05.5.0.5(1) Identify a response or
	solution and support why it makes sense,
	using support from research.
Possible Connections to Eighth Grade	E.08.1.D.1(1) Skill 10 Support the
Stanuarus:	standard. (For the purpose of noting key
	the standards) Listen to read and
	understand a wide variety of informational
	and parrative text including classic and
	contemporary literature noetry magazines
	newspapers reference materials and online
	information
	E.08.1.D.1(6) Skill To Support the
	Standard: (For the purpose of noting key

the standards) Clearly identify specific
words or wordings that are causing
comprehension difficulties and use
strategies to correct.
E.08.1.E.1(1) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Understand, learn, and use
new vocabulary that is introduced and
taught directly through informational text,
literary text, and instruction across the
subject areas.
E.08.1.F.1(1) Read textbooks; biographical
sketches; letters; diaries; directions;
procedures; magazines; essays; primary
source historical documents; editorials;
news stories; periodicals; bus routes;
catalogs, technical directions, consumer,
workplace, and public documents. $\mathbf{F} \cdot 0 9 \cdot 1 \cdot \mathbf{C} \cdot 1 \cdot 1$ Identify and/or summarize
E.00.1.G.1(1) Identify and/of summarize
supporting details, and opinions in
informational and practical selections
E 08 3 A 1(2) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Discuss ideas for writing
with classmates, teachers, and other
writers, and develop drafts alone and
collaboratively.
E.08.3.A.1(3) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Identify audience and
purpose.
E.08.3.A.1(4) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Choose the form of writing
that best suits the intended purpose-
personal letter, letter to the editor, review,
poem, report, or narrative.
E.U8.3.A.1(9) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Edit and proofread one's

own writing, as well as that of others, using
the writing conventions, and, for example.
an editing checklist or list of rules with
specific examples of corrections of specific
errors
F 08 3 B 1 (1) Use descriptive language
E.00.3.B.1(4) Use descriptive language
that charmes and enhances ideas by
establishing tone and mood through
figurative language, sensory images, and
comparisons.
E.08.3.B.1(5) To present a lively and
effective personal style, use varied sentence
types (simple, compound, complex, and
compound-complex) and sentence
openings.
E.08.3.C.1(1) Use correct spelling
conventions
F 08 3 D 1(1) Use consistent verb tenses
E.00.3.D.1(1) Use consistent vero tenses. E.08.3 D.1(2) Correctly use frequently
E.00.3.D.1(2) Confectly use frequently
misused words (e.g., among, between;
fewer, less; bring, take; and good, well).
E.08.3.F.1(1) Use correct capitalization.
E.08.3.G.1(1) Write legibly.
E.08.3.H.1(1) Personal Narrative
SC.08.2.A.1(4) Identify differences and
similarities between plant and animal cells.
SC.08.2.A.1(5) Recognize how structural
differences among organisms at the
cellular tissue and organ level are related
to their habitat and life requirements
SC 08 2 A 1(6) Identify photosynthesis as
the process by which plants use the operation
from light to make means out of early and
from light to make sugars out of carbon
dioxide and water, and that this food can be
used immediately for fuel or materials or it
may be stored for later use.
SC.08.2.B.1(1) Describe how the traits of
an organism are passed from generation to
generation.
SC.08.2.B.1(2) Distinguish between
asexual and sexual reproduction
SC.08.2.B.1(3) Identify traits inherited
through genes and those resulting from
interactions with the arritement
interactions with the environment.
SC.08.2.C.1(2) Identify that sunlight is the
major source of energy in most ecosystems

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	happen or occur concurrently or
	sequentially.
	SS.08.4.C.1(4) Understand the effects of
	19th century westward migration, the idea
	of Manifest Destiny, European
	immigration, and rural to urban migration
	on indigenous populations and newcomers
	in the United States.
	SS.08.4.D.1(1) Understand how various
	groups of people were affected by events
	and developments in Oregon state history.
	SS.08.5.0.1(1) Clarify key aspects of an
	event, issue, or problem through inquiry
	and research
	SS.08.5.0.3(1) Examine a controversial
	event issue or problem from more than
	one perspective
	SS.08.5.0.4(1) Examine the various
	characteristics causes and effects of an
	event issue or problem
	SS.08.5.0.5(1) Consider two or more
	outcomes responses or solutions: identify
	their strengths and weaknesses: then
	conclude and justify which is the best
Possible Connections to CIM Standards:	F CIM 1 C 1(1) Read at an independent
Tossible Connections to CINI Standarus.	and instructional reading level appropriate
	to grade level
	F CIM 1 D 1 (1) Skill To Support the
	Standard: (For the purpose of noting key
	skills that support classroom instruction of
	the standards) Listen to read and
	understand a wide variety of informational
	and parrative text including classic and
	contemporary literature noetry magazines
	newspapers, reference materials, and online
	information
	$\mathbf{F} \mathbf{CIM} 1 \mathbf{F} 1(1)$ Skill To Support the
	Standard: (For the purpose of noting key
	skills that support classroom instruction of
	the standards) Understand loarn and use
	new vocabulary that is introduced and
	new vocabulary that is introduced and taught directly through informational taut
	literary text, and instruction across the
	menary text, and instruction across the
	Subject areas. $\mathbf{E} \in \mathbf{CIM} + \mathbf{E} + 1 + 1$ and $1 = 1 + $
	E.C.IWI.I.F.I(I) Kead textbooks;
	biographical sketches; letters; diaries;

directions; procedures; magazines; essays;
primary source historical documents;
editorials; news stories; periodicals; bus
routes; catalogs; technical directions;
consumer, workplace, and public
documents.
E.CIM.3.A.1(1) Skill To Support the
Standard: (For the purpose of noting key
skills that support classroom instruction of
the standards) Use a variety of strategies to
prepare for writing such as brainstorming
making lists mapping outlining grouping
related ideas using graphic organizers and
taking notes
F CIM 3 A 1 (3) Skill To Support the
Standard: (For the nurpose of noting key
skills that support classroom instruction of
the standards) Identify audience and
ne standards) ruchting audience and
F CIM 3 A 1(4) Skill To Support the
E.C.INI.S.A.I(4) SKIII TO Support the Standard: (Ear the nurness of noting law
standard. (For the purpose of noting key
skills that support classicolli instruction of the standarda) Chaosa the form of writing
the standards) Choose the form of writing
that best suits the intended purpose-
personal letter, letter to the editor, review,
poem, report, or narrative.
E.C.IWI.S.B.I(S) Use precise language,
action verbs, sensory details, and
appropriate modifiers.
E.C.IWI.S.C.I(I) Produce writing that
snows accurate spelling.
E.C.I.VI.S.D.I(S) Demonstrate an
understanding of proper English usage,
including the consistent use of verb tenses
and forms.
E.CIM.3.G.I(I) Write legibly.
E.CIM.3.H.1(1) Personal Narrative
SC.CIM.2.A.1(3) Identify unique
structures in cells from plants, animals, and
prokaryotes.
SC.CIM.2.A.1(7) Describe photosynthesis
as a chemical process and part of the
carbon cycle.
SC.CIM.2.C.1(1) Describe and analyze the
effect of species, including humans, on an
ecosystem.

SC.CIM.2.C.1(2) Predict outcomes of
changes in resources and energy flow in an
ecosystem.
SC.CIM.2.C.1(3) Explain how humans
and other species can impact an ecosystem.
SC.CIM.2.C.1(4) Explain how the balance
of resources will change with the
introduction or loss of a new species within
an ecosystem.
SC.CIM.4.A.1(1) Based on observations
and scientific concepts, ask questions or
form hypotheses that can be answered or
tested through scientific investigations.
SC.CIM.4.B.1(1) Design a scientific
investigation that provides sufficient data
to answer a question or test a hypothesis.
SC.CIM.4.C.1(1) Collect, organize, and
display sufficient data to facilitate scientific
analysis and interpretation.
SC.CIM.4.D.I(1) Summarize and analyze
data, evaluating sources of error or blas.
Propose explanations that are supported by
terminalagy
SS CIM 3 0 9(2) Distinguish between
renewable resources and non-renewable
resources and the global consequences of
mismanagement
SS CIM 4 D 1(1) Understand the causes
characteristics and impact of political
economic and social developments in
Oregon state history.
SS.CIM.5.0.1(1) Define, research, and
explain an event, issue, problem, or
phenomenon and its significance to society.
SS.CIM.5.0.3(1) Analyze an event, issue,
problem, or phenomenon from varied or
opposed perspectives or points of view.
SS.CIM.5.0.4(1) Analyze an event, issue,
problem, or phenomenon, identifying
characteristics, influences, causes, and both
short- and long-term effects.
SS.CIM.5.0.5(1) Propose, compare, and
judge multiple responses, alternatives, or
solutions; then reach a defensible,
supported conclusion.

Possible Connections to Common	CCG: Analyze words, recognize words,
Curriculum Goals:	and learn to read grade-level text fluently
	across the subject areas.
	CCG: Listen to, read, and understand a
	wide variety of informational and narrative
	text across the subject areas at school and
	on own, applying comprehension strategies
	as needed.
	CCG: Find, understand, and use specific
	information in a variety of texts across the
	subject areas to perform a task.
	CCG: Pre-write, draft, revise, edit, and
	publish across the subject areas.
	CCG: Understand the characteristics,
	structure, and functions of organisms.
	CCG: Understand the transmission of traits
	in living things.
	CCG: Understand the relationships among
	living things and between living things and
	their environments.
	ccc: Formulate and express scientific
	CCC: Design safe and athiast scientific
	investigations to address questions or
	hypotheses
	CCC: Conduct procedures to collect
	organize and display scientific data
	CCG: Analyze scientific information to
	develop and present conclusions
	CCG: Understand that any collection of
	things that have an influence on one
	another can be thought of as a system.
	CCG: Understand that both patterns of
	change and stability are important in the
	natural world.
	CCG: Understand that scientific
	knowledge is subject to change based on
	new findings and results of scientific
	observation and experimentation.
	CCG: Describe how daily choices of
	individuals, taken together, affect global
	resource cycles, ecosystems and natural
	resource supplies.
	CCG: Understand the relationship that
	exists between science and technology.
	CCG: Analyze the causes of human
	migration (e.g., density, food and water
--	--
	supply, transportation and communication
	systems) and its effects (e.g., impact on
	physical and human systems).
	CCG: Understand how people and the
	environment are interrelated.
	CCG: Understand and interpret events.
	issues, and developments within and across
	eras of U.S. history.
	CCG: Define and clarify an issue so that
	its dimensions are well understood.
	CCG: Explain various perspectives on an
	event or issue and the reasoning behind
	them.
	CCG: Identify and analyze an issue.
	CCG: Select a course of action to resolve
	an issue.
Possible Connections to Oregon Skill	Agriculture Cluster: Plant
Sets:	Sciences/Horticulture
	Environmental Services Cluster: Water
	Quality
	Natural Resources Management Cluster:
	Aquatic and Marine Management, Fish and
	Wildlife Resources, Forestry and Forest
	Products, and Recreation and Cultural
	Resources
Possible Connections to Career-Related	Personal Management: Identify tasks that
Learning Standards:	need to be done and initiate action to
	complete the tasks. Plan, organize, and
	complete projects and assigned tasks on
	time, meeting agreed upon standards of
	quality. Take responsibility for decisions
	and actions and anticipate consequences of
	decisions and actions. Maintain regular
	attendance and be on time. Maintain
	appropriate interactions with colleagues.
	Problem Solving: Identify problems and
	locate information that may lead to
	solutions. Identify alternatives to solve
	problems.
	Communication: Listen attentively and
	summarize key elements of verbal and non-
	verbal communication. Give and receive
	feedback in a positive manner.
	Teamwork: Identify different types of
1	teams and roles within each type of team.

describe why each role is important to
effective teamwork. Demonstrate skills
that improve team effectiveness.
Employment Foundations: Apply
academic knowledge and technical skills in
a career context. Select, apply, and
maintain tools and technologies appropriate
for the workplace. Explain and follow
health and safety practices in the work
environment. Explain and follow
regulatory requirements, security
procedures, and ethical practices.
Career Development: Assess personal
characteristics related to educational and
career goals. Research and analyze career
and educational information.





Appendix J:

Suggestions for Planning an Opportunities Fair

1. Time:

- Hold the event during school hours.
- Transportation can be an issue for students if the event is held after school. Some county schools will bus their students to the event if it is held during school hours.
- A recommended time is 11am-1pm.

2. Date:

- The event should be held in the spring from March-May if the participating organizations are offering summer positions.
- If there are a number of year round positions, the fair can be held on any day.

3. Location:

• The event should be held in a location that is central to Douglas County such as Roseburg or Winston. A few suggestive locations in Roseburg are Phoenix School's Multi-Purpose Room, Roseburg High School's gymnasium, the Armory, or Umpqua Community College.

4. Coordination:

• The event should be coordinated with Umpqua Community College and the Employment Department in the future.

• There are separate college and career fairs in Roseburg that are held within close proximity of one another. If there is one combined fair with all volunteer/career/college opportunities for students and adults, there might be a better turnout than three separate fairs.

5. Target Audience:

- The fair should target students and adults.
- The Employment Department can help recruit career positions since they put on career fairs regularly.
- If there are positions available for youth and adults, the whole community will benefit.

6. Organization Recruitment:

- Recruit participating organizations at least two months in advance and make followup calls and reminders.
- Send flyers to the organizations and make personal phone calls. Be persistent when inquiring.
- Make sure to get a wide variety of participants throughout the county.
- Write PSA's for KPIC and local radio stations
- Speak with the *News Review* and have information posted in the "Education" section of the newspaper.

• Have a representative attend community meetings such as Chamber of Commerce, CUP, Community Resource Network Meeting, etc. to help spread the information.

7. Student Recruitment:

- Make school visits and presentations to classes
- Send information to post in school newspapers and bulletins
- Hang up flyers
- Ask for announcements to be posted on the intercom
- Give several reminders each week
- Speak with the *News Review* and have information posted in the "Education" section.
- Give incentives for students to come such as extra credit in school, free prizes, and refreshments.

8. Adult Recruitment

- Post flyers at all participating organizations, Employment Office, Umpqua Training and Employment, grocery stores, and other locations that are frequently visited by a variety of community members.
- Write PSA's for KPIC and the local radio stations.
- Speak with the *News Review* and have the information announced in the newspaper.
- Have a representative attend community meetings such as Chamber of Commerce,
- CUP, Community Resource Network Meeting, etc. to help spread the information.

Appendix K:

Tips for Planning a National Youth Service Day Event

1. Create a Planning Committee:

Start planning the event at least 6 months in advance. Create a list of key stakeholders in the community. Visit <u>http://www.ysa.org/nysd/resource/planning.cfm</u> to obtain planning materials, curriculum guides, and free advertising materials.

Think about how you can involve the following groups:

- Youth Committees or Councils
- Local businesses
- Elementary schools, high schools, and colleges
- Service Clubs (Rotary, Lions, Elks, Kiwanis, etc.)
- Athletic groups or associations
- Elected and Appointed Officials
- Corporations (especially those that involve their employees)
- Nonprofit organizations
- Fraternal organizations
- Local government officials and agencies
- Neighborhood associations
- Media

2. Create a Common Vision and Purpose:

Use your overall vision, purposes, and main goals of National and Global Youth Service Day to think about how you want the service project (s) to look and what you want the project (s) to articulate to the community and/ or the media. How many young people should you expect? What do you want the young people to get out of the experience? (for example, understanding community needs and strengths, leadership skills, understanding of issues related to hunger and homelessness). What long-term impact do you want to facilitate?

3. Set Goals:

Once you have assembled your planning committee, use your vision and purpose to set specific and measurable goals. Goals may include certain learning objectives

Although your group might be very ambitious, try to pick just three major goals, such as:

- To advance the 5 goals of America's Promise (visit www.americaspromise.org)
- To recruit more people into existing service programs
- To improve the local schools through youth service
- To highlight the accomplishments of young people
- To forge new community partnerships
- To develop youth leadership in the community
- To educate youth on community problems
- To address the problem of _______
- To learn more about_

4. Pick your Projects:

Make plans based on your community's needs and the interests of your volunteers. National and Global Youth Service Day projects address a wide variety of issues, including hunger and homeless, the environment, health and nutrition, public safety, tutoring and mentoring, and many other areas. When thinking about what kind of project you will do, look around your school, neighborhood, community, country, or world. Think about where the needs are, what you would like to see improved, and how you can make a difference. When deciding on projects, the following suggestions can maximize the project.

- Make your project a service-learning project: Service-learning is a powerful educational strategy that enables young people to address important community needs by planning and executing service projects that are tied to curricula.
- Combine service with civic action to make a lasting impact. This includes voting; encouraging others to vote; educating peers, community members, and elected officials about key issues; advocacy and more.
- Invite others to serve with you, especially those who are not typically asked to serve. The number one reason that people volunteer for the first time is that someone directly asks them to. Yet many groups of young people are traditionally not invited to serve; for example: young children, youth with disabilities, youth of color, youth who are not performing well in school, youth in foster care, and youth who live in poor communities. Make a special effort to reach out to these young people, and others you know of who have not typically been asked to help others.

5. Set up a Planning Structure:

After you decide what projects to take on, determine what committee structures will best fulfill your needs. Create your structures based on the key questions: When? Where? How? Who? Materials? Cost? It is very important to establish a structure that allows for youth voice. Consider the lines of communication, the process for decision-making, and the channels of accountability. It is important to have a clear idea of who is doing what and when they are doing it. Your committee set-up depends on the size of your project, the amount of participants for the project, how elaborate your goals are, and what projects you choose for National and Global Youth Service Day. The best structures have multiple leadership positions so many talented people can work on a project at the same time. This also increases the capacity of the project to handle many volunteers. The following is a sample list of committee chairs for N and GYSD.

- Overall coordinator
- Fundraising chair
- Project logistics chair
- Photo/video coordinator
- Public relations chair
- Recruitment chair
- Service-learning coordinator
- Evaluation and record-keeping chair

6. Create a Timeline:

Work from N and GYSD backwards when setting dates and create a structure for ongoing evaluation and accountability. For example, discuss the timeline at the beginning of each meeting. If things are not on schedule, the group determines how to keep things on track and what additional support or resources might be needed. Things to remember when writing a timeline: be realistic and remember that each deadline affects many others. Each committee should determine their own deadlines that are added to their own master list.

N & GYSD SUGGESTED TIMELINE

September-December:

- Recruit members for the Planning Committee
- Create Planning Committee
- Set up sub-committees and assign chairs
- Consult with schools
- Research community needs and determine N & GYSD event(s)
- Apply for a project grant from YSA

January:

- Develop informational materials, flyers, etc.
- Begin planning event logistics: equipment, etc.
- Put the N & GYSD logo on your homepage www.YSA.org/nysd
- Begin volunteer outreach process
- Begin soliciting funds, sponsors, etc.
- Invite members of the media and elected and appointed officials to participate

February:

- Invite key speakers and presenters for events
- Post your activity on www.YSA.org/nysd
- Select/finalize sites for projects and events
- Start student projects and display in public

March:

- Begin pre-registration
- Obtain permits, if necessary
- Determine "site specific" equipment needs
- Solicit/confirm food donations or purchases
- Finalize all donations, materials, and publicity
- Launch media campaign
- Prepare agenda of event and logistical needs
- Confirm with sites, team leaders, and donors

April:

- Prepare signage for event
- Reconfirm sites, donors, media, speakers, elected officials, etc.
- Arrange transportation and storage of material
- Visit sites for last minute preparations
- Perform team leader training

- Perform final "walk-throughs"
- Schedule future volunteer opportunities that you can promote at your N & GYSD project

7: Create a Realistic Budget and Start Fundraising:

Before you begin fundraising, design a budget itemizing all of your project expenses. Keep in mind that service projects do not have to be expensive. Make sure, however, that your budget includes everything you might need for your project – for example, stationery, postage, film and developing, long distance calls, copying, and scrapbook or photo album for documentation, food, streamers, balloons, flyers, poster board, T-shirts, hats, buttons, and posters. You may also need to purchase or rent equipment and materials like paint, rakes, or a sound system.

Fundraising is generally broken down into three simple steps:

- Target potential supporters;
- Inform them of your project;
- Ask for and solidify their contribution.

Youth Service America, with the help of their sponsors and several partners, offers hundreds of grants every year to help youth, teachers, and organizations implement service and service-learning projects for National & Global Youth Service Day and on-going service throughout the year. Through the grants program YSA generates awareness about particular issues, spotlights models of service excellence, and develops the capacity of youth and organizations to plan successful service projects. Typically, the grants and awards program supports service projects that:

• Present a clear project plan (including why the project is needed; proposed number of volunteers, planning timetable, partnerships, etc.).

• Address an important need, and provide clear and specific benefits to those served by the project.

• Involve youth in all stages of the project process (planning, execution, evaluation) and recruit a substantial amount of youth volunteers.

• Reach out to youth who are not traditionally asked to serve (youth with disabilities, younger children, youth in disadvantaged communities, minorities, etc.).

• Invite elected officials and dignitaries at the local, state and/or national level to be involved in the service event.

• Involve members of the media (reporters, disc jockeys, photographers, etc.) to support the project.

• Engage youth in service throughout the year and seek long-term changes.

Oregon SOLV is a non-profit organization that offers small grants and supplies for projects that benefit Oregon's landscape. Visit <u>www.solv.org</u>

8. Get the Media Involved:

Consider assigning a Media Coordinator to engage local and regional media about your N & GYSD project. While the Media Coordinator does not do all the work or give all the interviews, all aspects of public relations go through him or her to minimize confusion. The Media Coordinator should contact members of the media, get them excited about your project and schedule interviews for others working on the project. Keep the media focus on the youth participants. The Media Coordinator may be a young person, or you may designate one or more youth spokespersons to work with the Media Coordinator. Youth spokespersons should be prepared to talk with members of the media about the project, about National & Global Youth Service Day as a national event, and

how youth service benefits your community year-round. The media will not come looking for you. You must inform the media of your project to receive coverage! If it is possible, make a personal contact to ensure your story is understood. Here are some ways to tell the media about National & Global Youth Service Day and your project's role in it.

1. Develop a Relationship: Take time between now and April to get to know key members of the local media. Call and introduce yourself. Ask reporters for a personal appointment to tell them about National & Global Youth Service Day. Bring along any written materials you have. Be ready to explain in a concise but enthusiastic way why you are excited about National & Global Youth Service Day.

2. Engage Media Partners: Create a formal role for one or more media partners, such as the local affiliate of a national TV network (ABC, CBS, NBC, FOX), a popular radio station, or your local newspaper. This gives the media outlet a greater stake in your project, and increases the likelihood that they will cover your event. Roles for the media partner may include:

• Broadcasting live from your volunteer recruitment fair or pre-N & GYSD event. This gives you a chance to talk about N & GYSD, and stir up excitement about the event. The media partner could give away prizes to those who come down and register to volunteer.

• Airing pre-N & GYSD public service announcement to let people know how they can volunteer with you on N & GYSD.

- Sending a popular TV anchorperson, DJ, etc. to emcee your kick off event.
- Featuring your event on a television morning show, weather report, etc.
- Giving out awards to volunteers and profiling winners in their newspaper, morning broadcast, etc.

9. Recruit Volunteers:

Start by prioritizing groups or people you want to reach. Think about who needs to know early and who can be contacted closer to the event. What meetings do you need to attend? Listed below are suggested techniques to recruit volunteers.

1. National & Global Youth Service Day posters. Hang them up everywhere. The sooner you can get them out, the better. Attach tear off response cards with a phone number to get more information. Contact YSA for preprinted posters or design your own!

2. Post your project on the N & GYSD website at www.YSA.org/nysd. A surprising number of people seek service opportunities online. Posting your project will help potential volunteers find you.

3. Ask your mayor and governor to help. Ask them to film/tape a Public Service Announcement, issue an official proclamation of N & GYSD, and serve with you! FYI: The US Conference of Mayors is an N & GYSD National Partner.

4. Place announcements in high school/college/local newspapers. Contact local radio and television stations for spots in their volunteer sections. Inquire about newsletters for places of worship, community organizations, U.S. Congressional offices, and your state department of education.
5. Set up information/pre-registration tables in cafeterias, shopping malls, and other busy public

places. Have sign-up sheets available.

6. Distribute buttons, stickers, and flyers in the student center, school lobby, or local shopping mall. Contact Youth Service America for information about National & Global Youth Service Day 2006 promotional materials. 7. Sponsor an assembly or speaker focused on community service at a school, campus, corps, or agency site. At the presentation's end, invite everybody to help out at your N & GYSD project.8. Build partnerships with recognized community organizations and clubs (4-H, Scouts, Lions Clubs, YMCAs, etc.) for your N & GYSD event. You will double your people power in publicity and action!

9. Arrange a display at the school or campus art gallery, at a local bank, business, library, airport, or city hall. Include information on how to get involved.

10. Send out an email inviting everyone to get involved in your project.

11. Send out a press release to your school's announcement chairperson and the local media. They are always looking for community functions to publicize!

12. Include everybody. Families, youth, senior citizens, children, people with disabilities, business people, low-income families, and community officials all have something to contribute to your day of service.

10. Get Public Officials Involved:

Before you contact officials, you should decide how you would like them to be involved in your event. The more specific a request you make, the more likely the official is to accept. Also, having multiple options for the official to consider makes it more likely that you will receive his or her support in some way. In addition to attending your project, remember that officials have considerable influence and communications channels at their disposal that they can use to spread the word about your event.

Here are some things you can ask officials to do:

- Volunteer at your National & Global Youth Service Day (N & GYSD) project, leading youth by example.
- Address volunteers at the kick-off rally or closing celebration.
- Proclaim April 21-23, 2007 to be National & Global Youth Service Day in your state or city.
- Distribute a press release or a public service announcement highlighting your N & GYSD project and other N & GYSD activities taking place in your city or state. (See Appendix for sample press release.)
- Write an op-ed or letter to the editor encouraging youth participation in National & Global Youth Service Day and year-round service.
- Invite your state's congressional delegation, legislators, mayors and local elected officials, judges and their staff to participate in and/or organize activities related to National & Global Youth Service Day.
- Hold a recognition ceremony at City Hall or the State Capitol for participants after National & Global Youth Service Day.
- Ask the mayors, city managers, and/or town/county executives to issue a proclamation recognizing National & Global Youth Service Day in cities across your state.
- Create state or local Youth Advisory Councils. Young people have earned a place at the decision-making table. With a tremendous amount of energy, commitment, and creativity, it is only fitting that youth in America play a lead role in addressing the needs of their peers and community. Youth Advisory Councils can build on the positive impact of National & Global Youth Service Day throughout the entire year.

• Ask youth to assess your community's needs that can be addressed

One of the best ways to secure the support of public officials is to get them personally involved in great service projects. When an elected or agency official supports your event, you will often benefit from increased media attention, greater public awareness about your event, and heightened long run governmental support for your organization and program. Involving elected and agency officials in your project can also be a great learning experience for young people. By researching who their elected officials are, youth learn about the political process. By contacting them, they have the opportunity to practice writing professional communication. By engaging elected officials in a long-term strategy, they learn about civic engagement, advocacy, building professional relationships, and how government can work together with groups and citizens to solve problems. Contacting elected or agency officials can be intimidating because they are leaders with busy schedules, but it does not have to be. Keep in mind that elected officials are there to serve their constituents, and you are their constituent. Most officials will welcome the opportunity to support community leaders and young people who are doing something positive for the community.

TIPS TO REMEMBER WHEN CONTACTING/ENGAGING

ELECTED AND AGENCY OFFICIALS

• Invite them early! Most officials have very busy schedules so make sure to start early and follow up until they let you know if they can or cannot attend.

• Provide them with a variety of ways to get involved.

• Make sure to have date, time, location, and specific activity information available before you make contact with their staff.

• Most officials cannot make a commitment to attend an event without knowing all the details.

• Follow up!

• Make sure to follow up with their staff until you receive a confirmation of their attendance or a decline. If their staff tells you that your official is too busy to attend your event, be prepared to let them know about other ways that he/she can show their support of your efforts.

• Make sure to thank them for their involvement.

Literature Cited

- Americorps, A Program for the Corporation for National and Community Service. 7 November 2005. <u>www.americorps.org</u>
- Douglas County Interagency Narcotics Team. "Drug Info." 28 February 2006. http://www.co.douglas.or.us/dint/
- Douglas Educational Service District. "Douglas ESD Annual Report." 2003-2004. Roseburg, OR
- E-Government Portal. "Douglas County, Oregon." 1 November 2005. http://www.co.douglas.or.us/overview.asp#profile
- North American Association for Environmental Education. NAEE Constitution. 15 March 2006 <u>http://naaee.org/pages/index.html</u>
- Office for Standards in Education. "Outdoor Education: Aspects of Good Practice." September 2004. United Kingdom.
- Oregon Department of Education. 2003-2004 Dropout Data Manual. 2003-2004. Salem, OR.
- Turbitt, Neville-Project Perfect. "Key Stakeholder Support." 17 October 2005. http://www.projectperfect.com.au/info_key_stakeholder.php
- Umpqua Community Action Network. "Community Needs Assessment." 2005. Roseburg, OR
- United Nations Development Program-Management Development and Governance Division: Bureau for Development Policy. (January 1998). "Capacity Assessment and Development in a Systems and Strategic Management Context: Technical Advisory Paper No.3."
- United States Census Bureau. "Population Division." 2002.
- United States Department of Agriculture- Forest Service. Cooperative Forestry. (May 1998). "Conservation Education Task Force Report and Recommendations: Vision-to-Action Strategy." Washington, DC: United States Forest Service.
- United States Department of Agriculture-Forest Service. (January 2002). "Conservation Education Goals." Washington, DC: United States Forest Service.
- United States Department of Agriculture-Forest Service (February, 17, 2006). "Forest Service Conservation Education Plan: A Forest Service Strategic Plan to Foster Environmental Literacy 2006-2011." Washington, DC: United States Forest Service

- United States Department of Agriculture-Forest Service (November 2004). "Strategic Plan for 2004-2008." Washington, DC: United States Forest Service
- United States Department of Agriculture- Forest Service, Umpqua National Forest. (May 2004). "Umpqua National Forest Strategy." Roseburg, OR: United States Forest Service.
- White, Randy. Young Children's Relationship with Nature: It's Importance to Children's Development and the Earth's Future. Kansas City, MO: 2004.