

# Final Report to Metro Regional Parks & Greenspaces

**From  
Canby School District**

# 922600

**Ed Armstrong  
Project Manager**  
[armstroe@canby.k12.or.us](mailto:armstroe@canby.k12.or.us)

### **CANBY SCHOOL DISTRICT:**

The Canby School District, in partnership with the City of Canby, SOLV, and the Oregon Department of Education has developed a Summer Science Service Learning Institute.

The Canby School District is one of seven school districts that was chosen as a recipient of a Serve Oregon Grant that is allowing the district to create a district wide service learning model. Many of our projects are based in the area of natural resource education. The Metro Grant is designed to give our teachers the time and practice to create partnerships and service learning projects in the community of Canby.

The grant allows us to teach teachers the importance of training students in hands on science. In order to develop the natural resource stewards of the future, it is important and necessary that teachers have a connection with the local community. This grant has allowed us the opportunity to bring our local community and teachers to come together to work on the issues and solutions to maintain our quality of life in the community of Canby.

This grant provides for a Summer Institute in June. Teachers and community members were interviewed and selected based on interest and ability to provide science education within their organization and classroom. The institute will occur on June 13-15 with a follow-up during the school year. (See attached agenda)

Canby has a number of projects that teachers are working on to implement during the 2001-2002 school year. Examples of these projects include the development of a native plant nursery at Canby High School, a Salmon Art Project with an elementary school, and a restoration of a wetland with the City of Canby. Teachers will receive ongoing support in the 2001-02 school year and will continue to receive training during the district wide in service days.

The school district has received numerous grants and community support dollars to continue to develop their work over the next two years. A monthly advisory group has been meeting since Sept. to develop an overall plan and set of goals for the various projects.

**3. Provide a time line and tasks to be accomplished as you see it now.**

**Pre-grant activities**

- June 2000——Hired Service Learning Coordinator ( Ed Armstrong)
- July 2000——Coordinator engaged planning with various partners as listed.  
Brainstormed list of possible activities for 2000-01 school year.
- August 2000——Partners and coordinator presented Natural Resource Service Learning Projects to Canby Administrators. Administrators endorse concept.
- August 2000——Partnership with Portland Area Campfire formed to receive two Americorps members focused on Natural Resource and other service learning projects.
- August 2000——Americorps members recruited and trained by PSU, Oregon Department of Education, Service Learning coordinator.
- August 2000——City of Canby approached for possible partnership in wetland restoration.
- Sept 2000——Partners agreed to write Metro Greenspace Grant for teacher institute.**
- Sept 2000——Metro Greenspace Grant written and letters of support from partners.
- Sept 2000——Partners plan with Americorps members "Make a Difference Day" to involve citizens and teachers in a one day cleanup in wetland area in Canby. This is a way to begin to spark interest from teachers and community members for possible summer institute.
- Dec. 2000——Pre-Recruit elementary teachers and community members for interest in summer institute.
- Jan. 2001——Work with partners to develop schedule and refine training for each day of institute. Develop assessments and evaluation tools.
- Jan. 2001——Work with Americorps members, City of Canby and Metro to determine particular areas of the watershed to focus training activities.
- Jan. 2001——Seek funding from other resources. This is ongoing activity.
- Feb-March 2001——Work with curriculum director and teachers to discuss particular state benchmarks that would be focus of institute in the area of science.
- April 2001——Partners review final curriculum for any changes based on new data.
- May 2001——Prepare press release for event, print any required curriculum materials.
- May 2001——Materials to teachers and community participants.
- June 2001——Institute last week of June**
- July-August 2001——Report to Metro and community on results of summer institute.  
Recommendations for future changes.
- Sept. -Dec 2001——Teachers and community members implement plans in community and schools.
- Dec. 2001——Evaluation of implementation plans.

**Canby School District:  
Summer Science Institute  
June 13-15, 2001**

**Pre Assignments:**

Community partners

Bring community improvement plan

Educators

Bring applicable benchmarks, standards

**Institute Schedule:**

Day 1: Wednesday, June 13

AM: Basics of Service-Learning  
*include guest experts*

PM: Introduction to Restoration Process  
*Canby Community Park*

Day 2: Thursday, June 14

AM: Service-Learning "201":  
*Application of service-learning elements to a project:  
based on projects list developed by community  
partners, with community responsible for descriptions*

PM: Restoration "201":  
*How elements of a restoration project align across  
disciplines—provide multiple opportunities*

Day 3: Friday, June 15

AM: Building the Partnerships:  
*Finding partners  
How communities and schools differ  
From goals to outcomes: Planning for "win/win"  
Managing the partnership*

PM: Building the Lesson Plans:  
*Reflecting community and school goals/objectives*

# **2001 Summer Service-Learning Science Institute Application Packet**

**Offered through the Canby School District**

**Funded by a Partnership between Metro Greenspaces and  
U.S. Fish and Wildlife Service**

METROPOLITAN GREENSPACES EDUCATION GRANT  
SECTION A: APPLICATION SUMMARY SHEET

Organization: Canby School District

1. Describe your project. Include project goal, objectives and activities, the need for the project, target audience, partnerships and how it relates to urban natural areas and the Metropolitan Greenspaces Master Plan.

The Canby School District, in partnership with the City of Canby, Portland State University Center for Science Education, SOLV (Stop Oregon Litter and Vandalism), and the Oregon Department of Education are pleased to present the following application for a Metropolitan Greenspace Education Grant.

Over the last few years, the Canby area has experienced a dramatic increase in population growth, and the projections over the next ten years predict an even heavier population surge. It is imperative that existing and potential community members understand not only the need to protect these urban natural areas but how they can be part of the solutions for restoration and training within the community. In order to begin this community education and involvement process, it is important to reach not only current residents but the citizens who will live in Canby over the next few decades.

In order to begin the first step of this work, we are suggesting using Metro Greenspace funds for the following model for the summer of 2001. Our project consists of a five day summer science institute for teachers and community members in the Canby area. Using the curriculum, staff, and other resources of the various partners listed above we would provide hands on and classroom activities that would educate the participants on watershed areas and river systems in the local community. Research has taught us that "learning by doing" and actually performing needed community restoration work will engage students in understanding the critical need to protect these natural areas. The engagement of teachers in this program will not only help them meet the objectives of the "Oregon Education Act of the 21<sup>st</sup> Century", but this proposed project will demonstrate to teachers the use of the "Oregon Service Learning" model. The Service Learning model instills in students the ethic to become active involved citizens in their local community. Canby School District was one of seven school districts in the state of Oregon that recently received funds from the Oregon Department of Education to support this Service Learning model. This particular grant money can be used to hire a part time coordinator position to work with the community and schools to set up a variety of service learning sites. The money from the Metro Greenspace fund will be used to support training and time for teachers and community members involved in this project to gain the skills and knowledge in local natural resource systems.

Training would be provided to ten teachers, with a particular effort to recruit teachers at the 4<sup>th</sup> and 5<sup>th</sup> grade levels. We are focusing on these grade levels because of the new alignment of the state science test occurring at the 6<sup>th</sup> grade. Additionally, we would recruit ten community members who have the potential of time and energy to become resources to the community at large. Examples of community members would include Americorps members, retired citizens, watershed council members, and public officials. Example of the training sessions that will be provided during the course of the five day institute include a hands on macroinvertebrate sampling, how to collect and test water samples using DEQ protocols, creating interpretive trails, signs and brochures, introducing and using curriculum materials from SOLV and Oregon Department of Education.

## **2001 Summer Service-Learning Science Institute Application Form:**

The SSLS Institute is a 5-day intensive program designed to immerse students in the understanding and application of service learning. Participants will develop an understanding of service learning as a teaching strategy, participate in a hands-on science project, develop potential community partnerships, explore grants and other resources for service learning and science education, and work on lesson plans to implement in the classroom.

Time: June 13<sup>th</sup>, June 14<sup>th</sup>, and June 15<sup>th</sup> with two follow-up Saturdays in the fall of 2001.

**Funding for this project is from a partnership between Metro and USFS.**

---

Applications Due: March 1, 2000

Applications will be reviewed and currently there are enough funds to fund ten (10) teachers to participate. There will be an effort to recruit teachers at the 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> grade levels. Please turn in your completed application to Ed Armstrong, Canby School District Office. If you have additional questions please call at 503-266-7861 x 1238.

Name: \_\_\_\_\_

Principal: \_\_\_\_\_

School currently teaching: \_\_\_\_\_

Your mailing address where you wish to receive mail: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

On an attached sheet(s) of paper please respond to the following questions:

1. Why are you interested in attending the summer institute?
2. Describe what you hope to attain out of this summer experience?
3. What is your current understanding of service learning, community partnerships and project based learning? Do you have a community partner at this time?
4. What types of things are you currently doing or hope to do in your classroom that might be expanded or created as a result of this opportunity?
5. Provide any additional information that you believe to be important in considering your application.

Principal Signature: \_\_\_\_\_

# Evaluations of Project

Summer Science Service Workshop : Feedback Form

In an effort to improve our delivery of Service Learning in the Canby School District please give us as specific information on the following questions. Thank you.

1. What was the best thing/s about this experience?

This experience has not only provided me with new colleagues to work with, it has also begun moving me out of my prescribed comfort zone into a project(s) about which I'm excited, and I know my principal will be as well.

2. If we would repeat this experience next year what changes would you suggest?

For me personally, condensing materials into a more precise, shorter version would be helpful. Also, either being involved in part of a service-learning project ourselves might be good or having actual teachers (such as Mike Walsh) who have done successful projects and/or their students with their enthusiasm - (or Max S.) would be helpful.

3. Regarding the instructor/s what feedback would you give to them?

I appreciated the wealth of knowledge, ideas, contact possibilities. I like a schedule that includes breaks and lunch times that I can count on (only a small complaint - I'm a short-term goal

4. Was the information received useful? *Yes. I need some absorption time.*

5. What do you need for next steps to help you implement the Service Learning Strategy within your classroom / school?

The 2 days you've given me with an accountability piece are very helpful. I may have just walked out, said it was a good, interesting class, and gone on with life otherwise,

*Thanks very much.*

*Tom Brenneman*

I'm planning to work with Nicki Salisbury. We'll meet Aug. 15 and Oct. 12 to discuss our rough drafts, refine, and further plan our project(s).

Summer Science Service Workshop : Feedback Form

In an effort to improve our delivery of Service Learning in the Canby School District please give us as specific information on the following questions. Thank you.

1. What was the best thing/s about this experience?

All the tools we were given & the concrete examples of projects.

2. If we would repeat this experience next year what changes would you suggest?

Actually spending time doing service (like taking out ivy at Community Park) It was very effective modeling in Bend.

3. Regarding the instructor/s what feedback would you give to them?

Susan did a WONDERFUL job. I wouldn't change a thing.

4. Was the information received useful?

The quality of the materials was excellent

5. What do you need for next steps to help you implement the Service Learning Strategy within your classroom / school?

More time to talk with others (like our classmates here) about projects. Bounce ideas off each other, talk about road blocks, etc.

Thank you for this opportunity. S-L reminds me why I teach... kids!

Summer Science Service Workshop : Feedback Form

In an effort to improve our delivery of Service Learning in the Canby School District please give us as specific information on the following questions. Thank you.

1. What was the best thing/s about this experience?

- Schools working together for the good of the whole - teaming, supporting
- Tools (notebook!) - All the great information!
- Seeing how Curriculum Goals can be met through S. Learning

2. If we would repeat this experience next year what changes would you suggest?

- Loved going to the Canby Park Site
- Meeting the community Partners SOLV & Matilda

3. Regarding the instructor/s what feedback would you give to them?

Susan had a tight presentation; however, getting the info to us seemed to be more important than class discussion & hands-on worktime in order to process. Susan was very credible having been a

4. Was the information received useful?

Yes!!

teacher and being so knowledgeable about the CIM/CAM

5. What do you need for next steps to help you implement the Service Learning Strategy within your classroom / school?

Worktime to develop the projects, using the wonderful tools given to us.

Thanks Ed & Susan



Summer Science Service Workshop : Feedback Form

In an effort to improve our delivery of Service Learning in the Canby School District please give us as specific information on the following questions. Thank you.

1. What was the best thing/s about this experience?

- Tools provided
- examples of other projects
- talks w specialists (Matilda, Steve)

2. If we would repeat this experience next year what changes would you suggest?

MORE hands-on activities to absorb materials, less time reading material to us (jig saw, small group discussions, etc.)

3. Regarding the instructor/s what feedback would you give to them?

Thankyou for all the great info! Esp. tools

Perhaps more time trying out tools and then evaluate success

4. Was the information received useful?

Examples of other projects.

5. What do you need for next steps to help you implement the Service Learning Strategy within your classroom / school?

Time to work out details (provided) and work w new principal @ ideas (and other teachers)

Summer Science Service Workshop : Feedback Form

In an effort to improve our delivery of Service Learning in the Canby School District please give us as specific information on the following questions. Thank you.

1. What was the best thing/s about this experience? Tools for planning, solutions for possible obstacles, team idea brain storming.
2. If we would repeat this experience next year what changes would you suggest? More time for planning. Possibly an hour at the end of each day to synthesize ideas that have popped up.
3. Regarding the instructor/s what feedback would you give to them? Excellent resource. Thorough presentation that really laid a foundation.
4. Was the information received useful? Yes. Plenty of worksheets to help with planning. Also, numerous ideas for partnerships.
5. What do you need for next steps to help you implement the Service Learning Strategy within your classroom / school? After planning, I will need ideas for possible grants, partnerships and ideas.

Summer Science Service Workshop : Feedback Form

In an effort to improve our delivery of Service Learning in the Canby School District please give us as specific information on the following questions. Thank you.

1. What was the best thing/s about this experience?

A great deal of detailed information and tools that will be very useful at school

2. If we would repeat this experience next year what changes would you suggest?

Need a tabbed folder with the info already in place (or ready to be compiled).

3. Regarding the instructor/s what feedback would you give to them?

More activities/less lecture. May have been effective to have teams do 'jigsaw' type activities and team sharing.

4. Was the information received useful?

Very useful information

5. What do you need for next steps to help you implement the Service Learning Strategy within your classroom / school?

Time in inservice to present info and some of the forms. Need a short, compiled packet of info.

## Summer Science Service Workshop : Feedback Form

In an effort to improve our delivery of Service Learning in the Canby School District please give us as specific information on the following questions. Thank you.

1. What was the best thing/s about this experience?

Time & Guidance for planning, information/knowledge needed to do planning, how to <sup>connect with</sup> partners & ~~what~~ how to ~~do~~ dialogue with them

2. If we would repeat this experience next year what changes would you suggest?

More examples of activities & resources that we can use with our kids in connection to science

3. Regarding the instructor/s what feedback would you give to them?

fantastic, supportative, ~~and~~ knowledgable

4. Was the information received useful?

yes

5. What do you need for next steps to help you implement the Service Learning Strategy within your classroom / school?

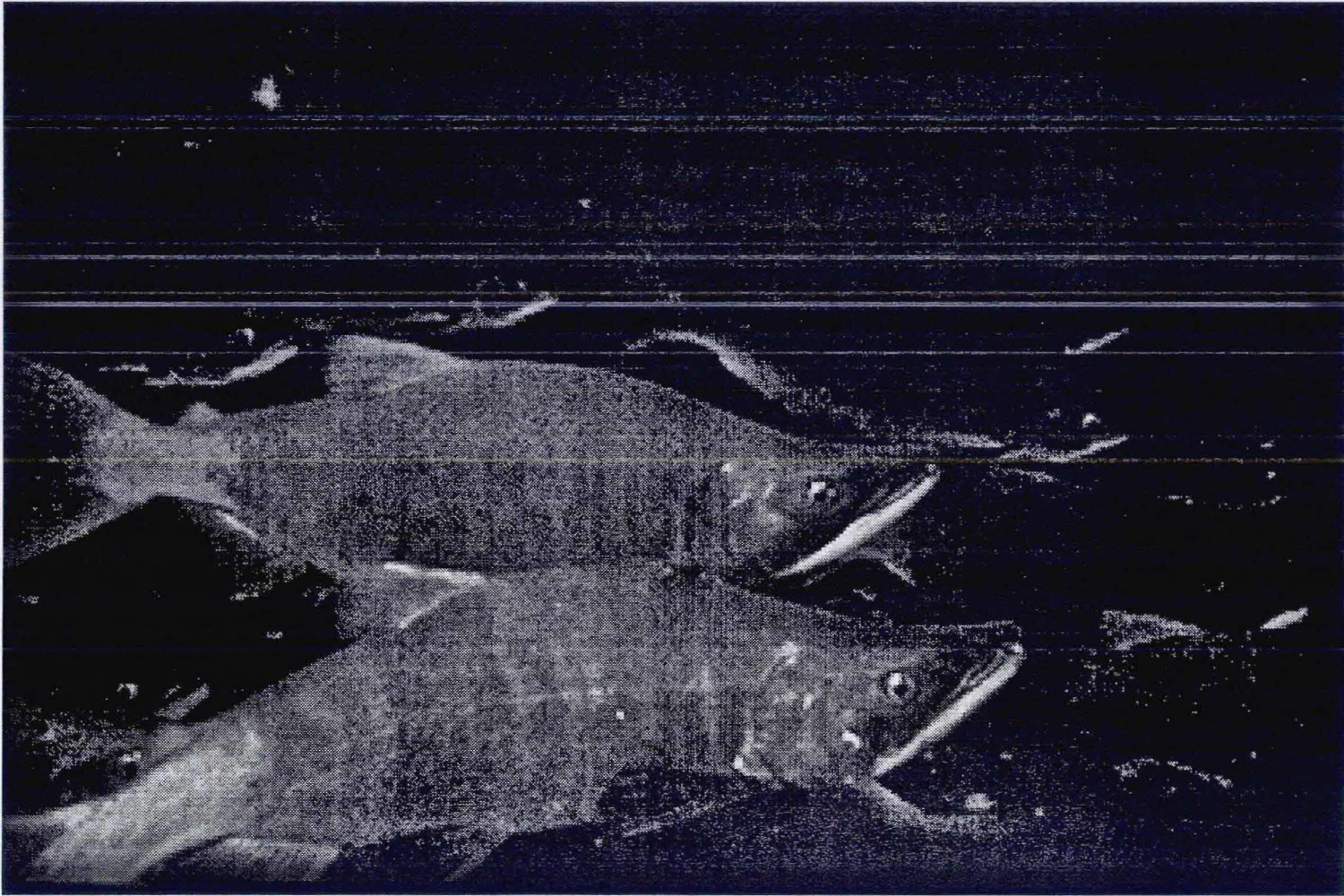
time - to meet with others & plan

guidance - in planning, introducing ~~it~~ to the students

# **Examples of Teacher Products**

# *Service Learning Project Proposal*

by Mona Nicholson



# *Purpose of Project*

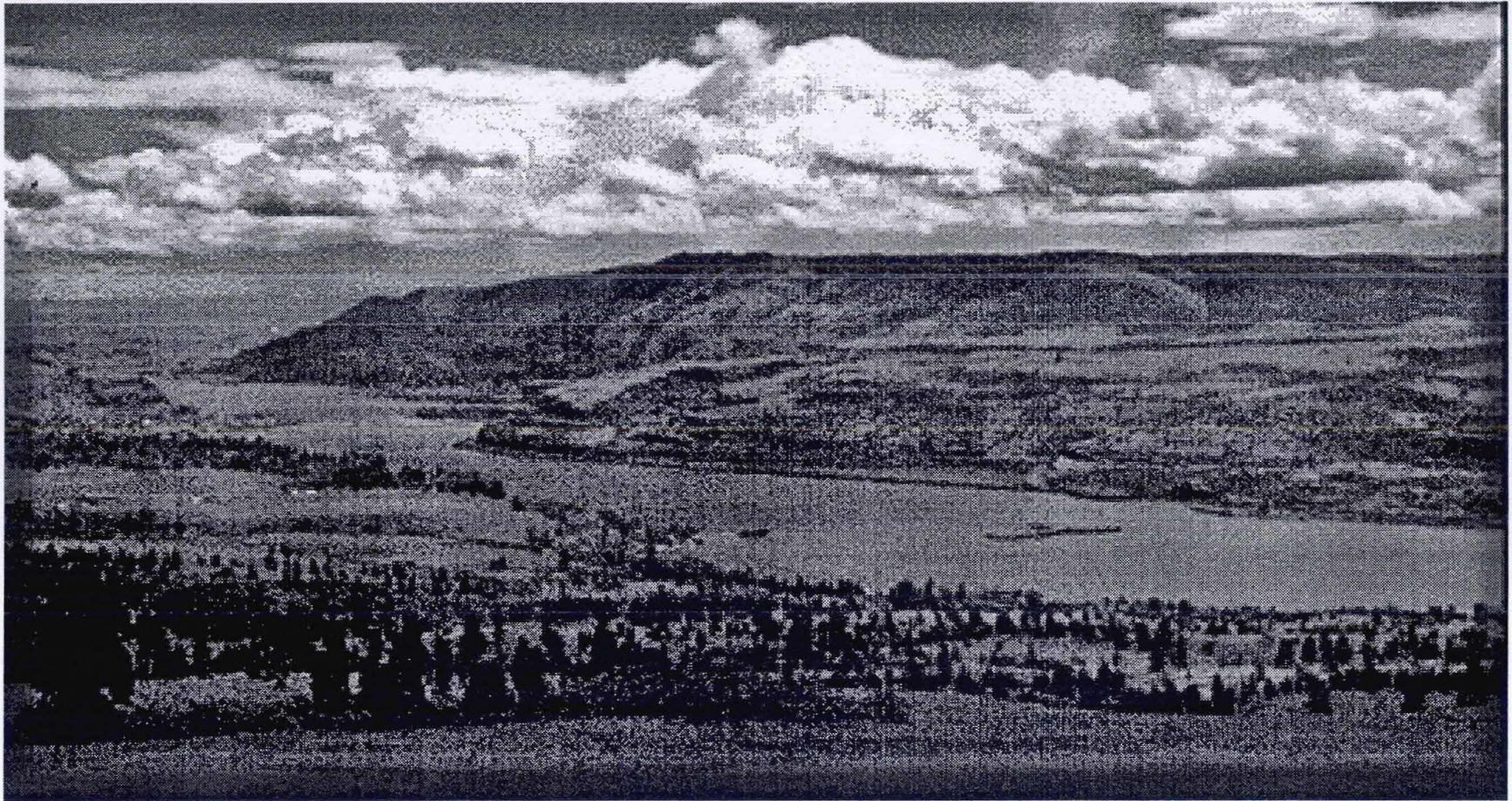
- To raise awareness about environmental communities
- To offer project based/integrated curriculum with a focus on language arts, art and science; addressing multiple ways of learning
- To help families and neighboring schools (Knight and Eccles) transition through and bridge the 2001-2002 boundary changes
- To create community partnerships with other Canby schools, businesses and organizations
- To celebrate our learning

# *Partnerships*

- Knight School PTA
- Service Learning Grant
- Eisenhower Grant
- Business Grants
- Salmonart Project
- Americorp Volunteer
- Regional Arts & Culture Council
- Oregon Wildlife Heritage Foundation
- Eccles School
- Carus School



# *Environmental Awareness*



# ***Curriculum***

- \* District Adoptions
- \* State Standards
- \* Teacher Created Curriculum
- \* Multiple Intelligences
- \* Internet (Marco Polo)
- \* Other sources

## **“Articulating Salmon in The Present Moment”**

...a program of study for community members of all ages. The integrated, thematic strategies are designed to enhance community achievement and motivation; and to encourage cooperative watershed awareness through community identity.

Soul Salmon [www.soulsalmon.org/education](http://www.soulsalmon.org/education)

## **SECRETS Curriculum**

- \* Sense of Wonder \* Ecosystems \* Cycles \* Relationships \*
- \* Energy Flow \* Time = Change \* Stewardship \*

**Central Cascades Alliance (CCA) [info@cascades.org](mailto:info@cascades.org)**

# *Multiple Intelligences*

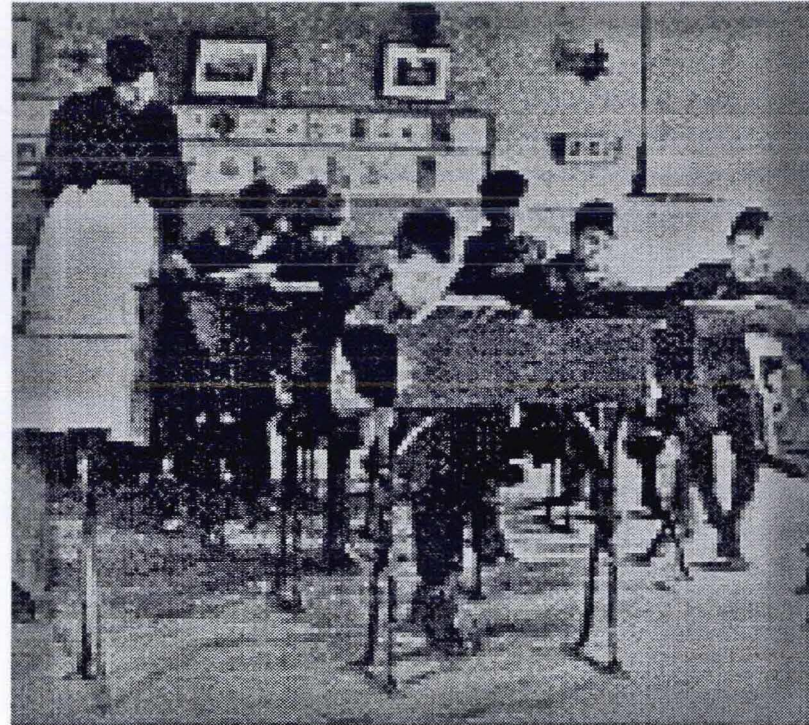
- **Verbal-Linguistic**  
reading, writing, telling stories
- **Math-Logic**  
math, problem-solving, logic, reasoning
- **Spatial**  
visualization, drawing, maps
- **Bodily-Kinesthetic**  
dancing, acting, crafts
- **Musical**  
singing, rhythms
- **Interpersonal**  
understanding people, communicating, organizing
- **Intrapersonal**  
reflecting, setting goals
- **Naturalist**  
understanding nature, making distinctions, identifying species

# *Assessment of Service Learning Project*

- Technology documentation to be presented at the end of 2001-2002 school year
- Ongoing brainstorm and re-evaluation meetings with curriculum developers, guest artists, authors, musicians, etc.
- Staff/community survey at the end of the 2001-2002 school year

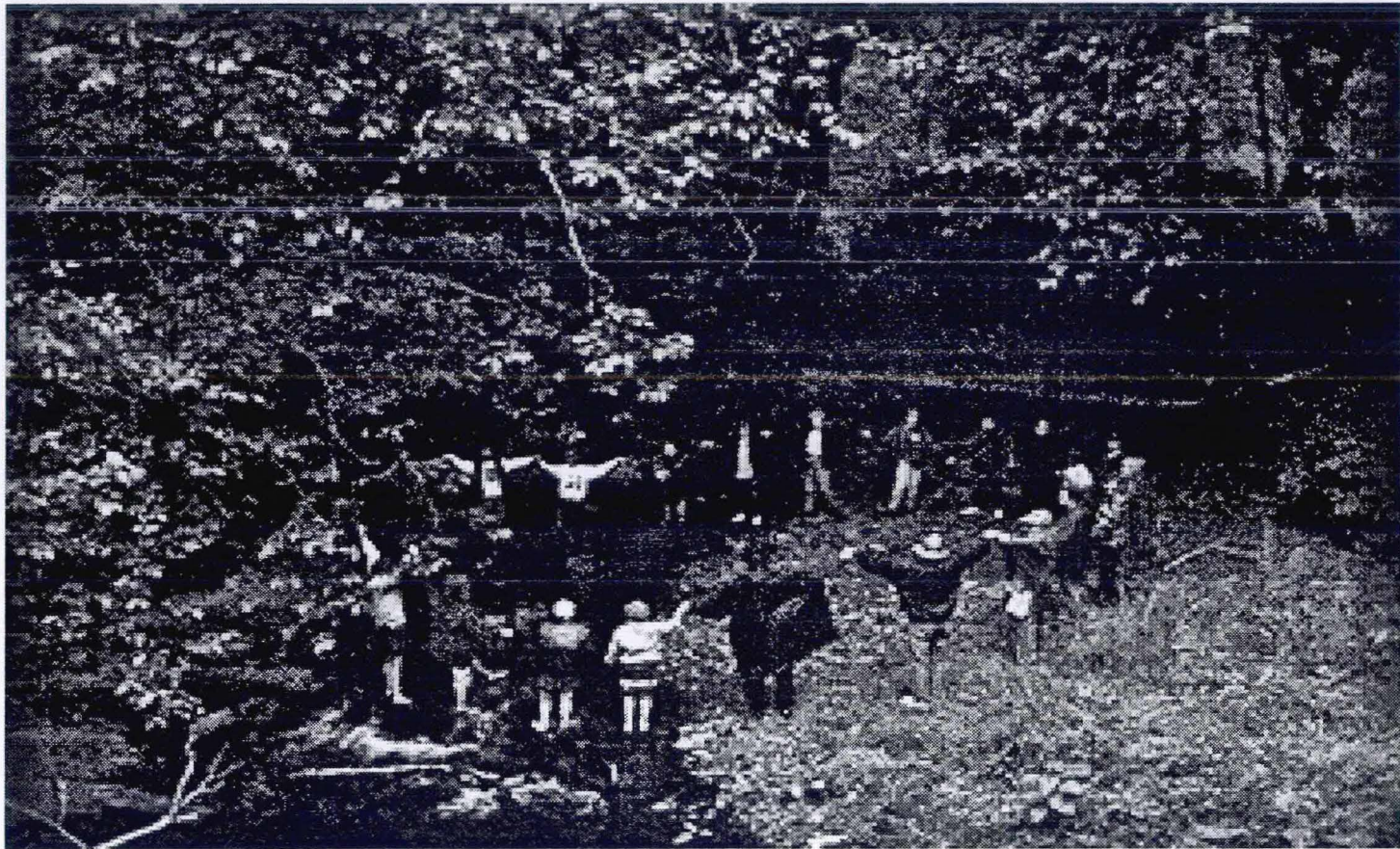
# *Curriculum Development Team*

- Mona Nicholson,  
Instructional Coordinator/Teacher
- Ed Armstrong  
District Grant Coordinator
- Brandeis Bailey  
First Grade Teacher
- Kelly Morris  
Second Grade Teacher
- Julie Johnson  
Third Grade Teacher
- Kelly Bishop  
Fourth Grade Teacher



# *Field Trips*

## *Naturalist Intelligence*



# *Community Activities*

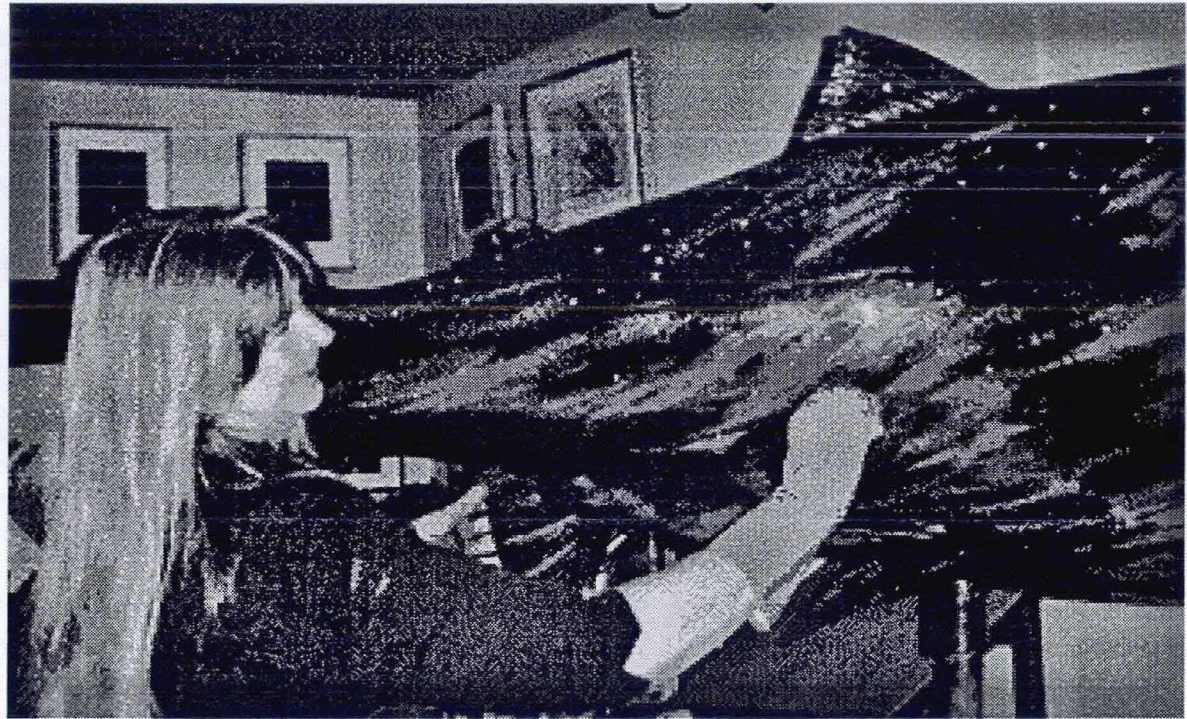
- *Assemblies*
- *Author in Residence*
- *Art Literacy*
- *Artist in Residence*
- *Aerial Photograph*
- *Celebration of Learning*

# *Artist in Residence*

*Laura Merrill*

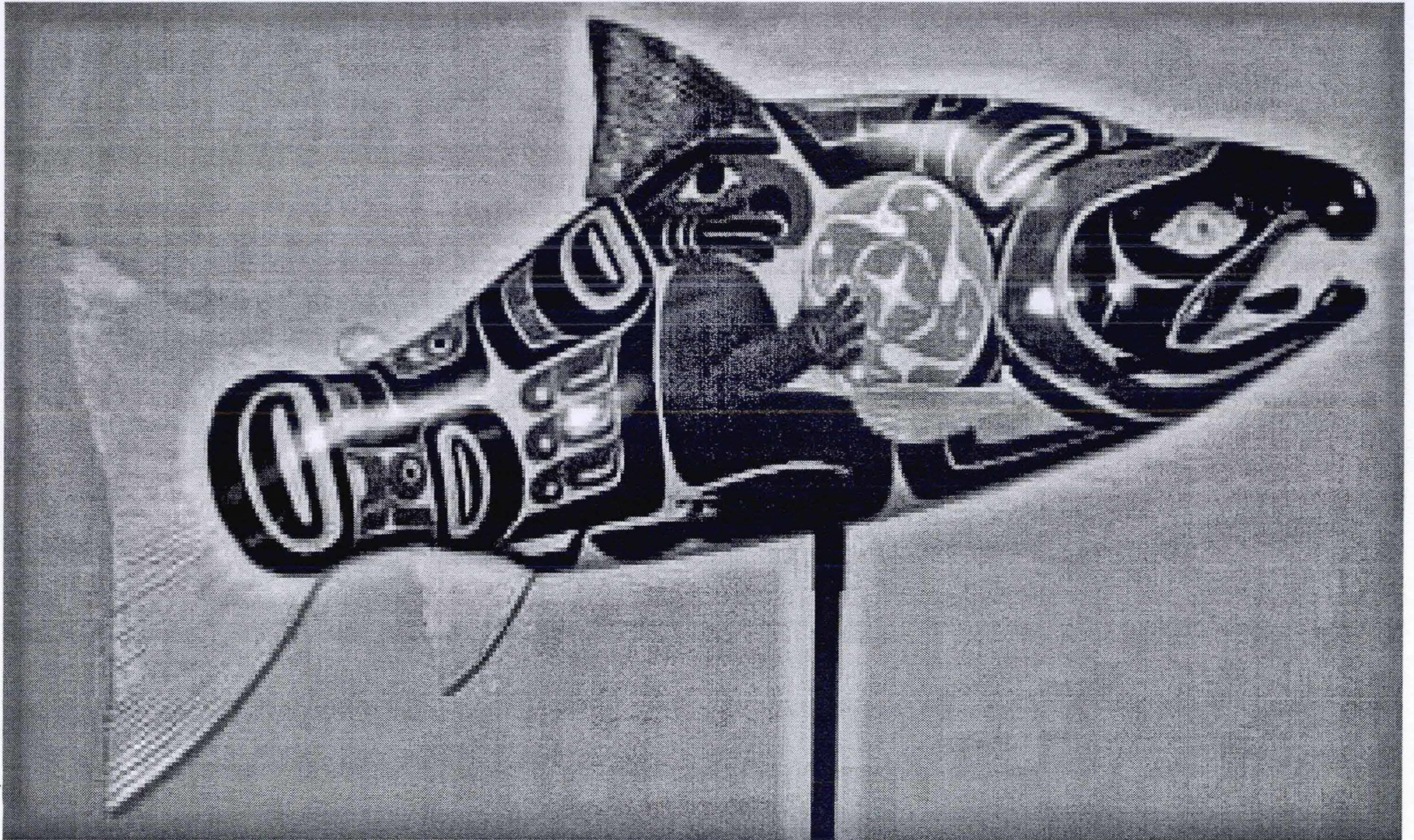
*"Salmonart"*

- Clothesline
- Fish Printing
  - Banners
  - T-Shirts

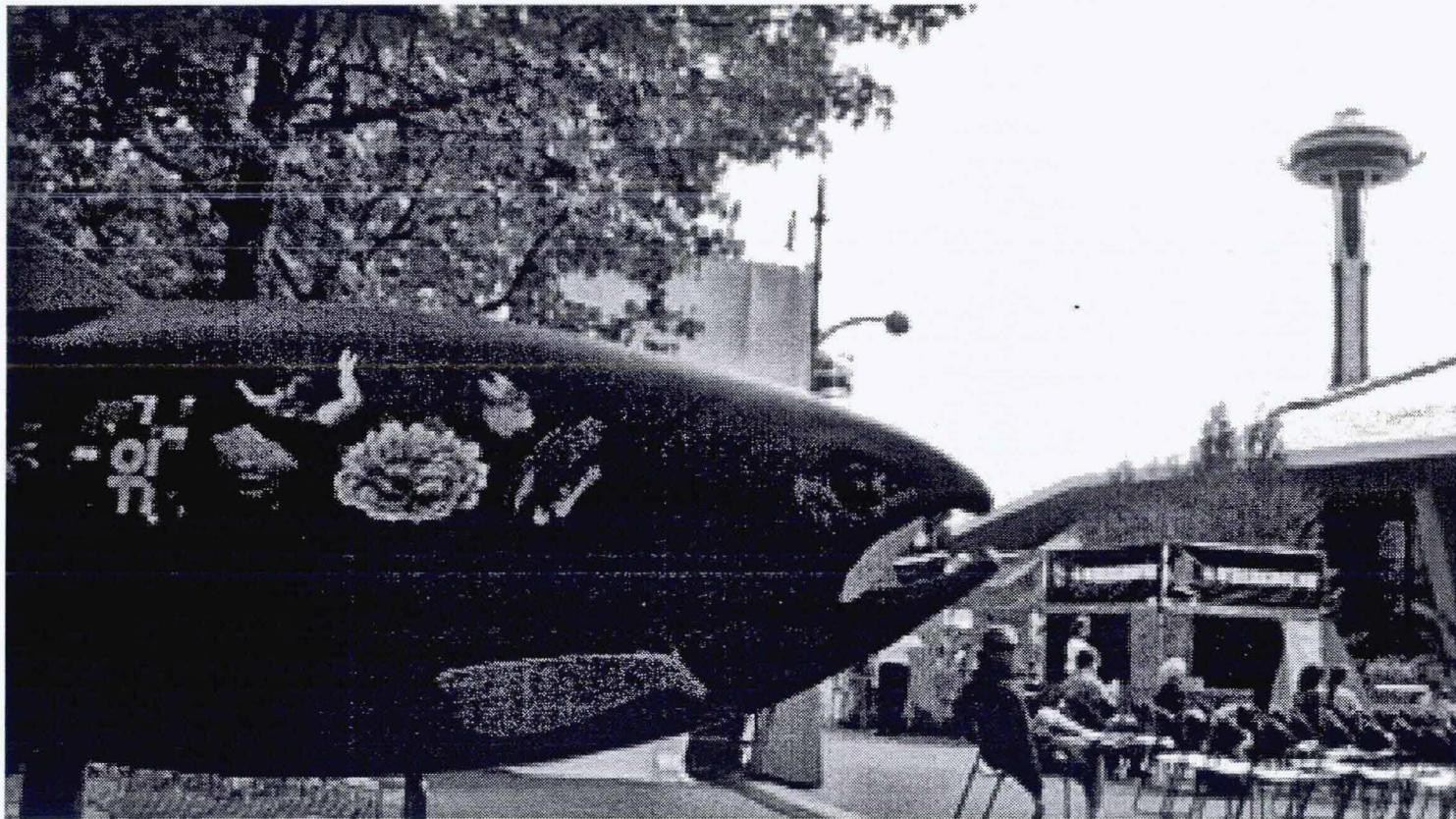


Visual Spatial Intelligence

# *"Salmonart"*



# *More “Salmonart”*



# *Gyotaku*

*Japanese  
Fish  
Printing*



# *Art Literacy*

- Escher (lithographer)



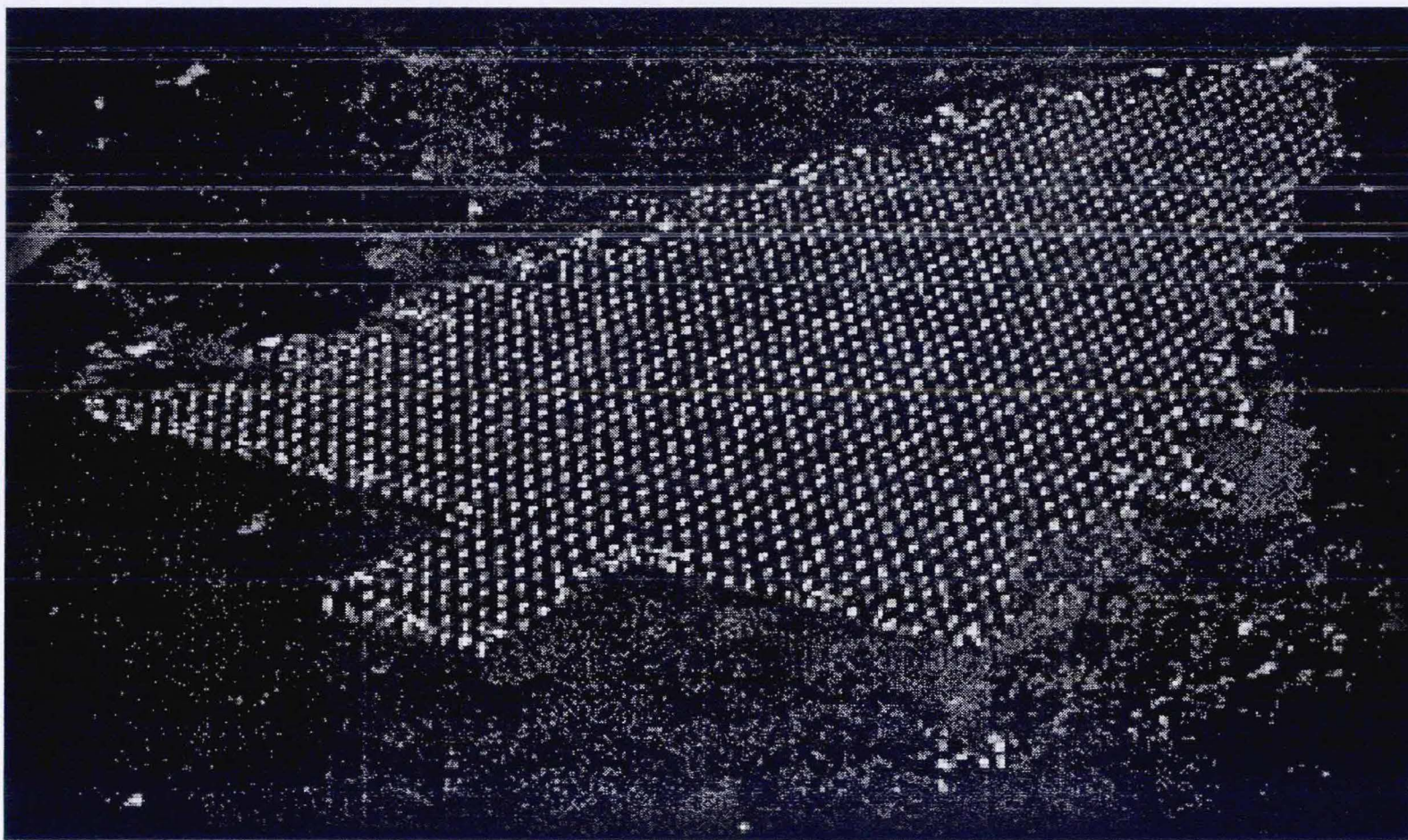
- Moore (sculptor)

- Seurat (pointillism)

- Wyland (painter/environmental)

# *Salmon Shape* with Daniel Dancer

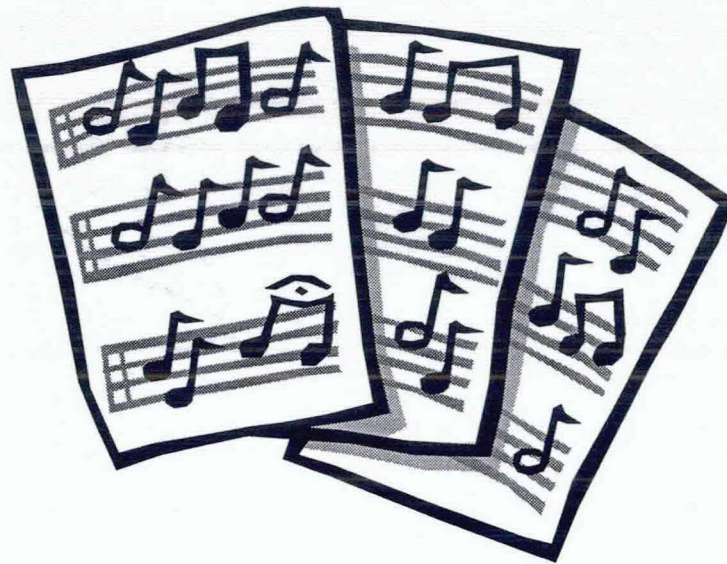
*Mathematical Intelligence*  
*Body-Kinesthetic Intelligence*



# ***“Sky in the Road”***

**A Free Concert for Clean Rivers**

*Musical/Rhythmic Intelligence*



(1999 City of Portland, Environmental Services)

# *Author in Residence*

*Jay W. Nicholas*

Author and fisheries biologist with the  
Oregon Department of Fish and  
Wildlife

*Down to the Sea:*  
*The Story of a Little Salmon*  
*and His Neighborhood*



# *Young Audiences*

*Will Hornyak, Storyteller*



*Verbal Linguistic Intelligence*

# *Celebration of Learning*



*\*Salmon Feast*

*\* Art Fest*

*Interpersonal Intelligence*



SUMMER INSTITUTE TEACHERS  
PRESENTING TO OREGON DEPT. OF  
EDUCATION

# Restoring our lost lands

*Concerted efforts will help wetlands recover in Canby Community Park*

BY JON BELL  
CANBY HERALD

**M**atilda Deas, project manager for the city of Canby, has a vision for the overgrown wetlands in Canby Community Park.

What she sees is a restored, natural area where invasive plant species are crowded out by native ones, where wildlife seeks refuge and flourishes, and where people can commune with nature inside the city limits.

And, in her vision for returning the wetlands to a more pristine state, Deas sees a prolific network of partnerships between the city, government agencies, local schools and the community.

This spring, her vision has come into focus.

"We value these wetlands, and it's so nice that Canby has this wonderful area," she said during a recent trip to the park. "(The wetlands) have been let go, and we're going to try and get them back."

The 3.5 acres of wetlands are located in Canby Community Park along the eastern edge of the Molalla River. They are accessible by 1,500 feet of unpaved trails

and two bridges that course through tall grasses and trees, many of which are not native to the area.

The effort to restore the wetlands began last year after Deas visited the park and saw their overgrown condition. Towering Canary reed grass and other intrusive plant species dominated the marshy site.

"I came down here and thought, 'Gee, this is all grown over,'" said Deas, who has worked on wetlands restoration projects along the Willamette River in the past. "I thought it would make for a good project."

*Projects like this create long-term partnerships. That's the beauty of these things.*

**Matilda Deas**  
Canby project manager

The first phase of the restoration project is expected to cost \$56,348 over 18 months. That, said Deas, is where the idea of partnerships comes in.

The city applied for and was awarded a Metro Greenspaces grant for \$14,500 in December 2001. The Canby Parks and Planning departments have contributed more than \$25,000 of in-kind donations, and \$10,000 worth of volunteer labor will come from Americorps and students and volunteers in the Canby School District.

Deas said Ed Armstrong, the district's research and development coordinator,



Photo by Steve Wilkowske

Yuliya Krishchenko, a sixth-grader at Ackerman Middle School, plants native grasses along the muddy banks of the pond at the Canby Community Park last Friday. Ackerman students are working with city of Canby staff on restoring wetlands.

has been instrumental in securing grant funds for the project through the district. A Serve Oregon grant will help train teachers how to combine community service projects — such as the wetlands restoration — with academics. Alternative Growing Biological Environment students at Canby High School may help with the native plant aspect of the project as well.

In addition, Georgia Pacific has donated \$2,000, and the city will apply for a National Oceanic and Atmospheric Administration grant to use for eventually

restoring a stream connection to the Molalla River.

And that, according to Deas, is only the beginning.

"It just keeps growing with more and more groups getting involved, which is good," she said. "It just takes the community to come in and help out."

Because all of the funds for the restoration come from grants or are in-kind contributions, and because of the educational aspects involved, the project has not met any opposition, Deas said.

"Projects like this create long-term partnerships. That's the beauty of these things," she added.

The Greenspaces grant application outlines the first phase of the plan to restore the wetlands.

An inventory of plants and wildlife will be taken, and non-native plants will be removed. The plan also includes restoring riparian vegetation, planting trees such as willow, cottonwoods, red

**Turn to LANDS on Page 3**

# Lands: Restoration could restore wildlife

Continued from Page 1

cedars and Douglas firs, and adding plants such as snowberry and salal to attract native wildlife.

In addition, there will be a demonstration site full of native plants, trees and several interpretive signs to attract public interest in the project.

"(The demonstration site) is the most awesome part of the park," Deas said, adding that the project will also involve a wetlands ecologist. "It will be the starting point, and will be planted with different types of plants to show people what the wetlands would look like if they were healthy."

The groundwork for the project has been laid, and while some work has begun — a clean-up and planting day by Ackerman Middle School students last Friday, for example — Deas said the restoration project will be an on-going effort.

"This is just the first phase of a multi-year effort," she said. "What we're really looking at is a long-term restoration and riverfront project."

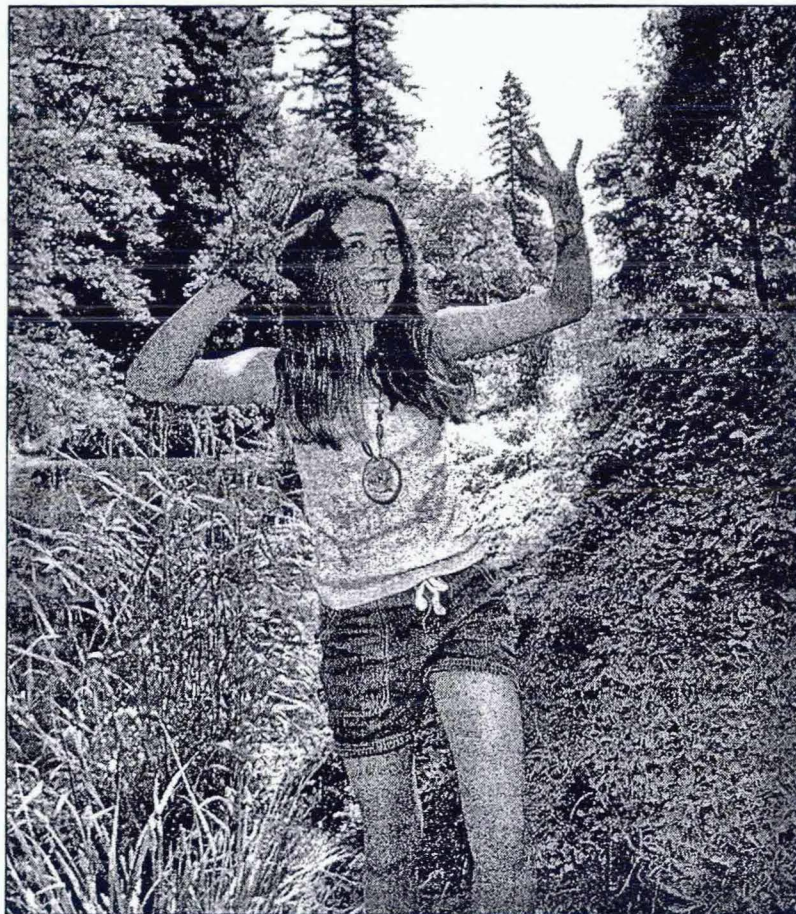


Photo by Steve Wilkowske

**Melisa Landis comes up with muddy hands after planting grass for the wetland restoration.**

Ultimately, if the restoration progresses as envisioned, the wetlands will host a variety of wildlife, from fish and frogs to beavers, otters and an array of birds. Already, wood ducks, blue herons and red-winged black birds make their home in the trees of the park, and tadpoles swim in the shallow stream.

Deas hopes to eventually add plants and trees around the park's pond, and to get as many groups and volunteers involved as she can. She said anyone can donate anything they want to the project, including time, equipment or expertise.

"It's going to be a real challenge because there's really a lot of work to do," she said. "You've just got to do a chunk at a time and use all the internal resources you have."

"Hopefully (this project) will show that this can be done anywhere, and we'll get people to come back here and experience what a natural area is supposed to be like."

For more information about the wetlands restoration project, or to volunteer, call Deas at 503-266-9404.

## Cable Television Happenings

### Bring It On!

**ESPN2. Fox News Channel. Telemundo. The Food Network.** These exciting channels are now accessible in some areas of DirectLink cable television areas.

**ESPN2**, while not new to the channel line-up, this network moves from Plus 1 to *Expanded Basic* thus becoming available to more subscribers. Big league and pro tours, championship events, news magazine programs, big time college football, and basketball. Plus, alternative lifestyle events the way only ESPN2 can do it! ESPN2 crossed the 70 million household mark in a record 80 months, more than a year ahead of the next-fastest growing cable network.

**Telemundo** is the ever popular Hispanic American network provider of novelas, talk shows, original sitcoms, sports and news, children's programming, blockbuster movies, reality, entertainment, and music programs. Including, Nickelodeon in Spanish as an exclusive feature in the US.

**Telemundo** is available for the first time in the Canby area in the *Expanded Basic* package on channel 63. And, because DirectLink has successfully negotiated a satellite feed, both Canby and Woodburn, which carried **Telemundo** on a low broadcast frequency signal, will receive an improved signal of video and sound quality. **Telemundo** on Woodburn remains on channel 50.

**The Food Network**, a highly requested channel, is now available in the Plus 1 package on channel 45 in Canby and channel 53 in Woodburn. **The Food Network** is about people making profound and lasting connections through food. It taps into feelings and flavors that only food can evoke — comfort when we are sick, heartwarming dishes from mom's kitchen, lingering tastes from memorable travels, and adventure food that you always wanted to taste. Food is our social and emotional connection!



Fun and generous local sweepstakes and prize drawings are offered by cable networks. Canby and Woodburn subscribers have won, within the past year, a SONY digital camcorder, a 25" TV/VCR combo, a Charbroiler Gas Grill, numerous ESPN prizes, and snazzy USA Networks Eco-Challenge adventure gear.

You can get in on these sweepstakes and prize drawings! Be sure to check out DirectLink's advertisements in the TVviewer insert of the Saturday editions of The Canby Herald and Woodburn Independent. You can also find out about current promotions at DirectLink's cable television customer service centers. Join in the fun!

## Unique Project Flourishes at Canby High

Canby High School is known for excellence in education that extends beyond normal textbook studies. The Alternative Growing Biological Environment known as "AGBE" is a project that uses new technology and basic agricultural techniques to introduce students to a whole new way of learning.

Max Sherman and Ron Barker, AGBE's faculty, have created a classroom unlike any other on campus. Test tubes, plants, live fish, and portable hydroponics growth units act as a living learning center for students.

"We specialize in plant tissue culturing known as 'micropropagation,' said Max. "The classes are entirely student-driven; they choose which projects they want to work on. I haven't taught a regular class in two years."

The AGBE program is so successful that it has spawned a commercial venture in which the students sell tissue-culturing kits and supplies to other schools.

"Micropropagation is just the beginning," noted Max. "We're in the process of creating a mini river ecosystem where we'll hatch salmon eggs and grow fish. We've received national recognition for the AGBE program. The students are really excited about what we're doing here."

The Canby High School AGBE program is just one of the projects that receive funding from DirectLink's Long Distance Schools program. For more information about how you can support your local school district through the Long Distance Schools program, please call the Canby Telephone Customer Care Center at 503-266-8111.

For more information on projects and service learning activities at Canby schools, please contact Ed Armstrong at 503-266-7861.

For more information about AGBE, including photos of hydroponics and aeroponics, you can visit their website at <http://198.236.11.157/agbe/>.



▲ Students raiseapia in the AGBE fish tank.



▲ Students tend to cultivated plants in the AGBE lab facility.