

APPENDIX E

Sample Institute Agenda and Session Descriptions

**AGUA PURA
LEADERSHIP INSTITUTE
Santa Barbara City College**

Life Sciences and Geology Building
Saturday, June 26 - Monday, June 28, 1999

Day 1

Saturday, June 26 - 9 AM- 4 PM

**Examining County Watershed Issues
Room LSG 201**

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|-------------|--|
| 9-9:30 | Introduction of participants and Agua Pura background, goals, partners - Michael Marzolla, UCCE 4-H Youth Development Program |
| 9:30-10:30 | Roundtable: Watershed issues from a Public Health, County Water and a watershed activist perspective—Dan Reid, County Health; Rob Almy, County Water Agency, and a community activist |
| 10:30-10:45 | Break |
| 10:45-noon | Watershed education introduction—Tim Donahue, GREEN Certified Trainer, Agua Pura Project |
| | <ul style="list-style-type: none">< What is a watershed?< Why do a watershed program?< How to map a watershed |
| Noon-1 | Travel to stream site at Rocky Nook Park, eat box lunch at site |
| 1-5 | Model watershed program at Rocky Nook Park : <ul style="list-style-type: none">< Techniques and materials< Creek walk< Sampling< Data analysis< Reflection exercise |

Day 2

Sunday, June 27, 10 AM - 7 PM

Watershed, Youth and the Latino Community
Room LSG 216

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|-------------|---|
| 10-noon | On-Line Internet Resources Workshop—Jeff Foote, Teacher, Kermit McKenzie Junior High School, Guadalupe, CA |
| Noon-1 | Lunch and resource tables |
| 1-2 | Re-enforcing Youth Resiliency: Engaging Youth and Community—Richard Enfield, 4-H Youth Development Advisor, San Luis Obispo County |
| 2-3 | Involving the Latino Community - Panel discussion—Debra Arviso, the Chicano/Latino High School Leadership Program; Gracie Huerta, Tre Condados Girl Scout Council; and Alejandro Vasquez, Los Compadres |
| 3-3:15 | Break |
| 3:15-4:15 | A Sense of Place/River of Words: Creating Artistic Connections—Sojourner Kincade-Rolle, Poet, A Sense of Place and Larry Iwerks, Artist, The Oak Group |
| 4:15-5:15 | Introduction to Adopt-A-Watershed (AAW)—Nancy Jones, AAW |
| 5:30 - 7:00 | Barbecue on the SBCC Cafeteria Terrace |

Day 3

Monday, June 28, 9 AM - 4PM

Linking Educational Opportunities to Youth Needs
Room LSG 216

- 9-9:30 Summary of Leadership Institute, Days 1 and 2
- Review goals of Agua Pura
 - Review community and youth needs
 - Review curricula and other resources
- 9:30-11:30 AAW - integrating watershed education into school curriculum—Nancy Jones
- Noon -1 Lunch and resource tables
- 1-4 Community Education Planning Activity
Group Feedback - Agua Pura: Involving the Latino youth in watershed education and action, focus groups—Elaine Andrews, UWEX Environmental Resources Center



DAILY SESSION DESCRIPTIONS

Agua Pura Pilot Leadership Institute, June, 1999

DAY 1 - Understanding Watersheds and Local Watershed Issues

Session 1

Local Watershed Issues Roundtable

Speakers from local organizations discuss the roles their organizations have relating to local watershed issues.

Speakers

Dan Reid of the Santa Barbara County Environmental Health Department gave an overview of *Project Clean Water*, the County-wide effort to improve water quality in local creeks and the ocean. *Project Clean Water* will help the County comply with the permit requirements of the Clean Water Act prior to June 1, 2002, while simultaneously addressing the more immediate issue of continuous beach closures due to creek and ocean water pollution. Dan also gave background information on water quality issues affecting Santa Barbara County, described the studies that have been done on the watersheds to date, and discussed the future plans of Project Clean Water.

Mary Sanvictores, California State Parks—Mary discussed her volunteer water quality monitoring program which is documenting the baseline condition of streams and lagoons in Santa Barbara County. They are specifically monitoring 4 local State Parks and collecting data that will help detect habitat degradation and monitor habitat quality in State Park streams and lagoons.

Joe Carillo, of Santa Barbara SEA, discussed the need for action using Latino youth.

Session 2

Introduction to Watershed Education

This session was designed to answer three main questions:

- < *What is a watershed?*
- < *Why do a watershed program?*
- < *How do you map a watershed?*

Activities to address these questions can be found in many resources. The following are examples of resources that can be used to answer these questions. Resource ordering information can be found in **Appendix D**.

- < To describe what a watershed is, use the simple exercise, *Watershed in Your Hands*, from the *From Ridges to Rivers* (Appendix D – page 3).
- < The book *Sourcebook for Watershed Education* includes a summary of reasons for doing a watershed program (Appendix D – page 6).
- < The activity, *Map Your Watershed* from *Give Water A Hand* shows leaders how to map a watershed on a topographic map ((Appendix D – page 1). Local maps should be provided.

Session 3 Exploring Watersheds

This session is a hands-on continuation of the previous session. It allows the many participants that are unfamiliar with creek ecology or assessment tools such as the GREEN low-cost water monitoring kit, to get hands-on experience.

This session should take place at a pre-determined field trip site(s). At this site you can conduct the following activities:

1. A discussion about uses of water monitoring data and how professionals can use collected data. ¹
2. The pros and cons of data collected by volunteers.
3. A simple creek walk:
Use a data sheet such as *The Creekwalk Notebook* in *Creek Watchers* (CASEC) to help participants characterize the stream and its watershed. Participants should visually assess the water, collecting data such as: Is the water clear or turbid? Are the banks eroded? What type of vegetation is present, native or exotic? Is there a lot of trash present? Are there drainage pipes present? What other signs of human impact are there? What are the positive and negative conditions and activities occurring at this site?

¹There are a variety of resources available describing the water quality monitoring. One especially useful publication is the free EPA manual, *Volunteer Stream Monitoring: A Methods Manual* EPA 841-B-97-003.

4. Follow up discussion about the creek walk data.

After participants complete their creek walk, gather the group together and have them discuss their findings. Ask for their ideas on the health of the creek. Does it need additional monitoring? Should anything be brought to the attention of water quality or public health agencies? You may even want to discuss how you would manage a youth group.

5. An opportunity to use water monitoring kits and conduct a macro-invertebrate analysis.

Macro-invertebrate analysis is a valuable tool for assessing stream quality because some species are more sensitive to pollution than others. Prior to the Institute, macro-invertebrate collection bags, such as those available through GREEN, should be set out in the stream. Macro-invertebrates caught in these bags can then be sorted and identified by participants using resources like the GREEN leaf pack sorting sheets and flash cards. Then, using the easy formula provided with the materials, participants can determine the quality of the stream.

You will also want to conduct some water quality tests using the GREEN low-cost water monitoring kits or similar kits. These kits come complete with an instruction guide and materials to test 10 water samples: pH, dissolved oxygen, biochemical oxygen demand, nitrate, phosphate, turbidity, temperature change and 3 coliform bacteria samples. Using this data, participants can determine whether the stream is within allowable limits for each of the measurements taken. Combining these results with the macro-invertebrate survey results will help give participants a good picture of the streams water quality and give them the confidence to use these methods with youth. (See Appendix D – page 1 for ordering information.)

DAILY SESSION DESCRIPTIONS continued

Agua Pura Pilot Leadership Institute, June, 1999

DAY 2 - Understanding Youth in the Community Sample Sessions

Session 1

Online Internet Resources Workshop

Provide a session that introduces participants to the many water resources available via the Internet. Include local resources.

Session 2

Re-enforcing Youth Resiliency: Engaging Youth and Community

Provide a speaker who can present research about adolescent behavior and the developmental assets of youth.

Research data is available from the Search Institute of Minnesota (www.search-institute.org). Its research shows that there are 40 developmental assets that are powerful influences on adolescent behavior. The more of these assets adolescents have, the more likely they are to exhibit more positive attitudes and behaviors and to reduce high-risk behaviors. There are eight categories of assets divided into either External or Internal Assets. The eight categories are: Support, Empowerment, Boundaries and Expectations, Constructive Use of Time, Commitment to Learning, Positive Values, Social Competencies and Positive Identity.

Session 3

Involving the Latino Community - Panel Discussion

Select local community members to provide a panel discussion about ideas for involving the Latino Community in water education programs.

Panel members should have expertise in outreach to the Latino community, but do not need to have watershed or natural resource expertise. This session will help the participants understand their Latino communities needs and how to better access the Latino youth through local organizations. Leaders from these organizations can open doors to the Latino youth community for water education.

Session 4

Creating Artistic Connections: A Sense of Place/River of Words

Offer leaders aesthetic or art-based opportunities to involve Latino youth in local water issues.

In the Santa Barbara, CA Institute, the poet Sojourner Kincade Rolle, lead the first part of the session. She described how she has used poetry in the school system to enhance student awareness of the environment. She also led participants in a poetry writing session.

Larry Iwerks, from a local artists' organization called Oak Group, discussed the group's work in using artistic impressions to get attention focused on local environmental issues. He finished his presentation with a slide show.

In Santa Barbara, relating art to local issues was highly valued by participants and was identified as an important strategy for connecting community members (youth and leaders) to their values about their community.



DAILY SESSION DESCRIPTIONS continued

Agua Pura Pilot Leadership Institute, June, 1999

Day 3 - Linking Community and Youth Needs to Education Opportunities

Session 1

Integrating Watershed Education into School Curriculum

This session will help participants understand how to integrate watershed education into a school program.

Start this session by familiarizing participants with state and local education standards and requirements. Then ask them to identify a specific local environment or water quality problem. Working in teams, participants break the problem down into simpler components then search education standards to look for potential links.

After this practice session, Leadership Institute graduates can work directly with local teachers to refine education goals and choose curriculum activities from the many resources provided at the Institute.¹

Session 2

Community Education Planning Activity

This session takes participants through the steps they should follow to start a youth water program.

The steps are:

1. Decide on a Water Education Goal (make it as specific as possible).
2. Describe the Community - Place, People, Water Issues.
3. Describe skills that community people need to address this water issue.
4. Describe your target audience - special needs/interests, skills needed to take action.

¹Adopt-A-Watershed offers a "K-12 science curriculum, which uses a local watershed as a living laboratory where students engage in hands-on activities. Each unit of the curriculum addresses grade level-appropriate science concepts and allows students to apply these concepts to field studies, restoration and community action projects. The curriculum does not reinvent materials currently in use, but instead complements units with other quality curricula and publications."

5. Identify community organizations that work with this target audience or address this water issue.
6. Redefine your Water Education Goal, incorporating this new information.

Divide participants into small groups, and have them answer each question. You may want to have a flip chart available for each group. When each group has finished, have a spokesperson from each group discuss the group's goal and receive input from other participants.

Session 3

Group Feedback - Agua Pura: Involving the Latino Youth in Watershed Education and Action

This session provides participants with an opportunity to integrate key information learned from the training and develop their own plan for local leadership.

Discussion focuses on three topics:

1. Latino Youth Involvement
2. Watershed Education
3. Providing Leadership for and with Latino Youth

For each topic the following questions can be asked:

Latino Youth Development

- How are Latino youth involved in watershed education?
- What can we learn from Latino youth involvement?
- What should be done to increase Latino youth involvement in watershed learning and action?

Watershed Education

- How could watershed education curricula be modified or designed to meet Latino youth group needs?
- How could other education activities/events be adapted to include watershed education relevant to Latino youth needs?

Providing Leadership for and with Latino Youth

- What skills are needed to facilitate Latino youth involvement with watershed learning and action?
- How can we work to meet those needs?