

# Los Alamos

Los Alamos National Laboratory  
Los Alamos, New Mexico 87545

## memorandum

(K)

1999

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DATE: September 29, 1999

FROM: Ken Mullen, ESH-18

MAIL STOP/TELEPHONE: K497/7-0818

SYMBOL: ESH-18/WQ&H:99-0392

SUBJECT: **SUMMARY AND SCHEDULE FOR WATERSHED MANAGEMENT PLANNING MEETINGS**

The interest in watershed management planning shown in the September 16 meeting was inspiring and the watershed integration group at the Lab is looking forward to making progress on an expanded and improved Watershed Management Plan with your participation. A summary of the September 16 meeting is included with this letter (Attachment 1).

We have set out an ambitious schedule of watershed planning meetings. We would like to meet with the entire group two times per month, the first and third Wednesday. Attachment 2 is that schedule for the first six meetings with an indication of the material the meeting is expected to cover. The material covered will have to be revised as we see the progress we make over these first meetings. A more specific agenda will be e-mailed or faxed before each meeting. All meetings will occur between 9:30 and 12:00 in the Pueblo Complex conference room at 1600 Diamond Drive in Los Alamos. A map to the meeting location is included as Attachment 3.

We will try to have materials prepared for each meeting that will make the meetings productive. Once we have started meeting, we will need your feedback on how to make our working sessions efficient while allowing all participants to provide input. Please contact me with suggestions on how to improve the way in which we work together.

I look forward to working with you to develop a plan that serves the needs of the watershed partners and allows us to reach our common goal: a healthy watershed. If you have any questions, contact me at 667-0818 (kmullen@lanl.gov) or Kelly Bitner at 884-8455 (Albuquerque) (bitner@neptuneandco.com).

KM/rm

Attachments: a/s

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K. Zimmerman, Los Alamos County, Los Alamos, New Mexico, w/att.  
J. Frost, Santa Fe County, Santa Fe, New Mexico, w/att.  
J. Bruin, Forest Service, Los Alamos, New Mexico, w/att.  
T. Gunderson, DLDOPS, MS A100, w/att.  
P. Longmire, EES-1, MS D469, w/att.  
C. Smith, EES-13, MS M992, w/att.  
E. Springer, EES-15, MS J495, w/att.  
B. Newman, EES-15, MS J495, w/att.  
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Cy: LANL Reading Room, MS A117, w/att.  
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**Attachment 1**  
**Los Alamos National Laboratory**  
**Watershed Management Planning**  
**September 16, 1999**

**Introduction**

Los Alamos National Laboratory (LANL) has written a draft Watershed Management Plan that pertains to the 43-square mile area within the LANL boundaries. Comments from stakeholders criticized the development of a watershed management plan that did not include the entire watershed and did not include the perspectives of the stakeholders. In response, LANL is seeking stakeholder involvement in revising the draft plan.

On September 16 the Laboratory invited stakeholders to a meeting to provide an overview of the draft Watershed Management Plan and to ask the stakeholders what degree of involvement they want to have in this planning process.

The Department of Energy supports the watershed planning effort. It is the overall DOE goal to fit in with efforts by others and work cooperatively.

**Draft Watershed Management Planning Overview**

Ken Mullen gave an overview of the watershed planning process used to develop the draft plan. In 1972 the Clean Water Act focused on point sources. Twenty-five years later the Clean Water Action Plan recognizes that a more holistic approach is need to improve water quality.

There are a number of reasons to work with our neighbors as partners in the watershed. One reason is the impact the Lab has had on neighbors. An example, there is measurable radioactivity in sediments that have washed down from the Laboratory onto San Ildefonso. Another reason is the potential to improve watershed management based on the findings of others. An example is the work on erosion being done at Bandelier. An additional reason is to allow our watershed partners to use LANL data. An example is the Forest Service may want LANL data to quantify the impacts of forest management practices.

The Watershed Management Plan was started in 1996 with a number of overall goals. One goal was to be a good steward of the natural resources entrusted to our care. Another goal was to be a long-term confirmation that the ER project has acceptably cleaned up sites. Other goals include compliance with the stormwater NPDES program and upgrading the LANL environmental surveillance program that has been ongoing since the 1940's.

There are three major objectives in the Draft Watershed Management Plan. The first is definition of the drainage system. There will be over 50 gaging stations over a 43-square mile area in a part of the country where it really doesn't rain much. But flashy systems like this require more data to adequately characterize them than watershed systems with more consistent flow. The second objective is to relate strategies for the protection of surface water and groundwater. The third objective is to provide enhanced

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documentation for Lab outreach. The water data has to be accessible to our partners and stakeholders. Right now the data is scattered all over the Lab. We have started development of a database and web interface with all of the surface water and groundwater data.

The Data Quality Objective (DQO) process was used in the development of the draft plan. Through this process issues were identified, criteria was developed to define what levels constitute a problem, and management actions that will be taken when the criteria are exceeded were established. Six issues were identified.

The first issue is water quality. Water quality indices were used in the criteria to define when water quality is a problem. If the water quality exceeds an index, the actions include verifying the exceedance is real, identifying the source, and doing something about the source. This is the general pattern of management actions defined for all of the issues.

The second issue is sediment impacts and the detrimental effects of erosion and sedimentation. Issue three is land use changes leading to hydrologic adjustments that adversely impact the water quality. Protection of wetlands is issue four. Wetlands are recognized as valuable resources that must be protected from anthropogenically-induced stresses. Similarly, issue five recognizes the link between water quality and protection of habitat. Although this focuses on threatened and endangered species, our goal is to protect wildlife habitat. Finally, issue six is intended to protect groundwater quality. The surface water and alluvial groundwater are inseparable, so the surface water quality is important to maintaining groundwater quality.

The draft Watershed Management Plan crosswalks with the Clean Water Action Plan. Ten elements of the Clean Water Action Plan are addressed to some degree by various parts of the plan.

Steve Rae emphasized LANL support for the planning effort. The Lab wants to move toward a larger, more encompassing approach. A major objective of this effort is to solicit input. This effort could become a model for how DOE facilities manage resources in cooperation with other agencies and organizations.

### **Santa Fe National Forest Watershed Activities**

John Bruin described the Valle Fuels Reduction project. The project covers 15,000 acres, although most of the treatment is focused on 4,000 acres in the southwestern area. The planned treatments include thinning and some prescribed burning. Although the primary purpose of the project is fuel reduction, there are additional benefits anticipated, including expanding meadows and rejuvenating aspens. The project is in the final stages of the Environmental Assessment. Collection of hydrologic data is not part of the project, but the data that LANL collects will be useful.

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The project is a cooperative effort between Los Alamos County and the National Forest. The Forest Service wants to do more in watershed management, particularly as a complement to other efforts. Sharing data and maintaining a broader perspective is important.

**Participant Responses**

The participants at the meeting were asked to respond to three questions:

1. Is your organization interested in participating in developing this plan and what level of involvement is desired?
2. Should the scope of the watershed plan be expanded to include the entire watershed?
3. What other issues (other than the six issues described earlier) should be addressed in the plan?

The responses to the first question are summarized in the following table:

<b>Participant</b>	<b>Organization</b>	<b>Degree of Involvement?</b>
John Parker	NMED/DOE-OB	Receive meeting minutes
Ralph Ford-Schmid	NMED/DOE-OB	Participate in all meetings
Raymond Montoya	NMED/DOE-OB	Participate in all meetings
Robert Wingo	NMED/DOE-OB	Canyon-specific, sampling/analysis, data release
David Sarracino	San Ildefonso Pueblo	Participate in meetings; particularly interested in storm events and sediment
Neil Weber	San Ildefonso Pueblo	Canyons that drain onto pueblo land; data availability
John Bruin	Forest Service	Participate in all meetings
Kristen Dors	EPA/NMED-SWQB	Sampling/analysis; nonpoint sources; other sections
Barbara Hoditschek	NMED/SWQB	Participate in all meetings
J. Michael Chavarria	Santa Clara Pueblo	Receive announcements of all meetings, participate in sections of interest; receive meeting minutes
Brian Jacobs	Bandelier	Participate in sections that affect the park
Tim Glasco	Los Alamos County	Participate in all meetings
David Gordon	Cochiti Pueblo	Receive announcements of all

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<b>Participant</b>	<b>Organization</b>	<b>Degree of Involvement?</b>
		meetings; participate as resources allow
Kim Birdsall-Hill	NMED/HRMB	Participate in meetings involving the technical aspects, e.g. sampling/analysis; specific canyons

In response to the second question regarding the scope of the plan, there was general consensus among all of the meeting participants that it should be broadened to include the entire watershed. The organizations occupying the watershed indicated their willingness to become partners in developing the expanded Watershed Management Plan.

The third question about issues that should be included in the plan drew the following responses:

- Address the impact of watershed processes on cultural resources
- The plan should assess impacts that are not captured by risk assessment
- The focus is too narrow, it should consider all receptors, not just threatened and endangered species
- The land use issue should include transfers of land and transfer of water supply
- Management and institutional integration should be explicit
- Impacts of fish consumption, e.g. from Cochiti Lake
- Outreach/education – how will information be provided to the public, newsletter
- Nonpoint source pollution – management actions seem weak
- Implementation – what is the time frame and how can the public and stakeholders participate
- Existing vegetation and wildfire potential
- Natural Resource Trustee involvement
- Mesa top erosion in woodland areas
- Impact of erosion on cultural resources
- Hydrologic effects of fires
- Characterization of the surface water-groundwater interface
- Monitoring of aquatic organisms in the Rio Grande
- Incorporation of ER-funded sediment studies
- Broaden the scope beyond compliance; this is not a compliance-driven document
- Funding – Funding available to county and pueblos through EPA (319), Department of Agriculture; Natural Resource Conservation Service; assistance with grant writing

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<b>Participants</b>		
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Todd Haagenstad	LANL/ESH-20	<a href="mailto:hth@lanl.gov">hth@lanl.gov</a> ; 665-2936
Barbara Hoditschek	NMED/SWQB	<a href="mailto:barbara_hoditschek@nmen.v.state.nm.us">barbara_hoditschek@nmen.v.state.nm.us</a> ; 827-0596
Brian Jacobs	Bandelier	<a href="mailto:brian_jacobs@nps.gov">brian_jacobs@nps.gov</a> ; 672-3861
Raymond Montoya	NMED/DOE-OB	<a href="mailto:Raymond_Montoya@nmen.v.state.nm.us">Raymond_Montoya@nmen.v.state.nm.us</a>
Ken Mullen	LANL-ESH-18	<a href="mailto:kmullen@lanl.gov">kmullen@lanl.gov</a> ; 667-0818
Felicia Orth	Los Alamos County	<a href="mailto:orthf@lac.losalamos.nm.us">orthf@lac.losalamos.nm.us</a>
John Parker	NMED/DOE-OB	827-1541
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Catherine Smith	LANL/EES-13	<a href="mailto:chsmith@lanl.gov">chsmith@lanl.gov</a> ; 667-0113
Marja Springer	LANL/E-Div/S&T/PD	<a href="mailto:marja@lanl.gov">marja@lanl.gov</a> ; 665-7112
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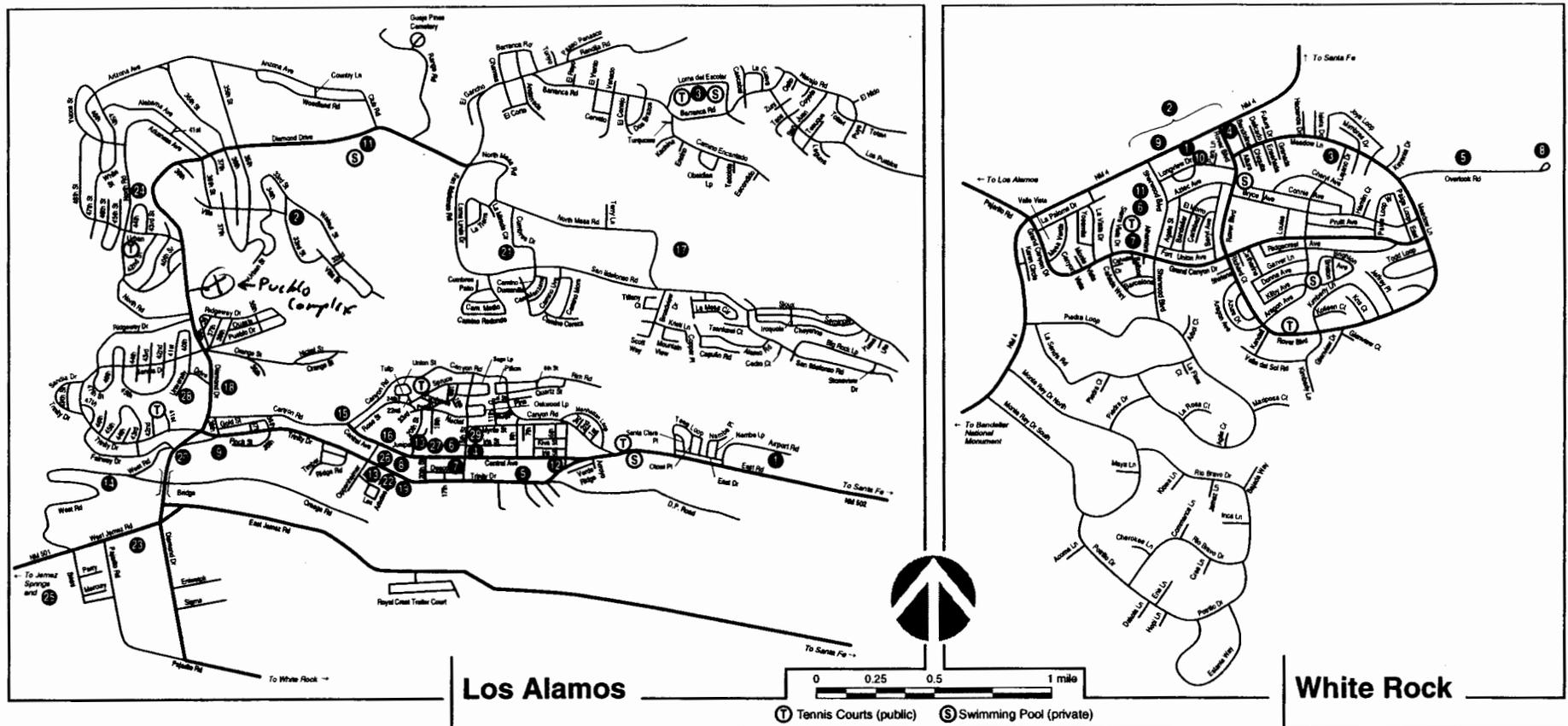
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Neil Weber	Pueblo of San Ildefonso	<a href="mailto:ildefonso@trail.com">ildefonso@trail.com</a> ; 455-2273
Robert Wingo	NMED/DOE-OB	<a href="mailto:rowingo@excite.com">rowingo@excite.com</a> ; 672-315?

**Attachment 2**  
**Watershed Planning Meetings**  
**Tentative Schedule**

<b>Date</b>	<b>Time</b>	<b>Subject</b>
October 6	9:30-12:00	Formalizing Watershed Partnership and scope
October 20	9:30-12:00	Formalizing Watershed Partnership and scope
November 3	9:30-12:00	Chapter 1
November 17	9:30-12:00	Chapter 1
December 1	9:30-12:00	Chapter 2
December 15	9:30-12:00	Chapter 2

All meetings will be held in the Pueblo Complex conference room, 1600 Trinity Drive, Los Alamos

# Attachment 3



## Los Alamos

## White Rock

① Tennis Courts (public)    ⑤ Swimming Pool (private)

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| <ul style="list-style-type: none"> <li>1 Airport</li> <li>2 Aspen Elementary School</li> <li>3 Barranca Mesa Elementary School</li> <li>4 Bradbury Science Museum</li> <li>5 Business District</li> <li>6 Chamber of Commerce</li> <li>7 Community Involvement and Outreach Office (LANL Reading Room)</li> <li>8 County Municipal Building</li> <li>9 Department of Energy - Los Alamos Area Office</li> <li>10 Fuller Lodge, Fuller Lodge Art Center and Gallery East</li> </ul> | <ul style="list-style-type: none"> <li>11 Golf Course</li> <li>12 Hilltop House</li> <li>13 Holiday Inn Express</li> <li>14 Ice Rink</li> <li>15 Larry R. Walkup Aquatic Center (public)</li> <li>16 Library</li> <li>17 Los Alamos County Fairgrounds</li> <li>18 Los Alamos High School</li> <li>10 Los Alamos County Historical Museum (next to Fuller Lodge)</li> <li>19 Los Alamos Inn</li> <li>20 Los Alamos Medical Center</li> </ul> | <ul style="list-style-type: none"> <li>21 Los Alamos Middle School</li> <li>22 LANL Civilian and Industrial Technology Program Office</li> <li>23 LANL Main Technical Area (TA-3)</li> <li>24 Mountain Elementary School</li> <li>25 Pajarito Mountain Ski Area</li> <li>26 Police Station</li> <li>27 Post Office</li> <li>28 University of New Mexico, Los Alamos Branch</li> <li>29 YMCA</li> </ul> | <ul style="list-style-type: none"> <li>1 Bandelier Inn</li> <li>2 Business District</li> <li>3 Chamisa Elementary School</li> <li>4 Fire and Police Station</li> <li>5 Overlook Park (ball parks and picnic area)</li> <li>6 Pinon Park</li> <li>7 Pinon Elementary School</li> <li>8 Scenic Overlook</li> <li>9 Tourist Information Center</li> <li>10 Training Center (ESH)</li> <li>11 White Rock Community Building</li> </ul> |
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