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Title: **July 2014 Public Meeting Presentation, Individual Permit for Storm Water, NPDES Permit No. NM0030759**

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Intended for: Public, NMED, USEPA

Purpose: This presentation was prepared for the Individual Permit for Storm Water (IP) public meeting held at the Cities of Gold Casino in Pojoaque, NM, on July 8, 2014. The purpose of the meeting was to update the public on implementation of and compliance with the permit and to provide the opportunity for public comment as required under Part 1.I(7) of the IP (National Pollutant Discharge Elimination System Permit No. NM0030759). This presentation will be available on Los Alamos National Laboratory's public website.



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ADEP Surface Water Projects NPDES Storm Water Individual Permit Biannual Update

July 2014

- Please wait until the scheduled time to provide information or to ask questions
- Please identify yourself before speaking
- Please keep your questions short
 - Remember there may be others waiting to ask questions
- Please honor the process by keeping questions and comments civil and by using appropriate language
- Please yield the floor if requested by facilitator
- Please help the participants and facilitator ensure that the agenda content and timeframes are met

Agenda

Poster Session	5:30 p.m.	
Welcome	5:50 p.m.	Steve Veenis
Flood Mitigation Efforts and Field Update	6:00 p.m.	Jeff Walterscheid
Canyon Gage Network	6:20 p.m.	Amanda White
Permit Renewal	6:40 p.m.	Steve Veenis/Kate Lynnes
Communities for Clean Water	7:10 p.m.	Rachel Conn
Wrap-up	7:30 p.m.	

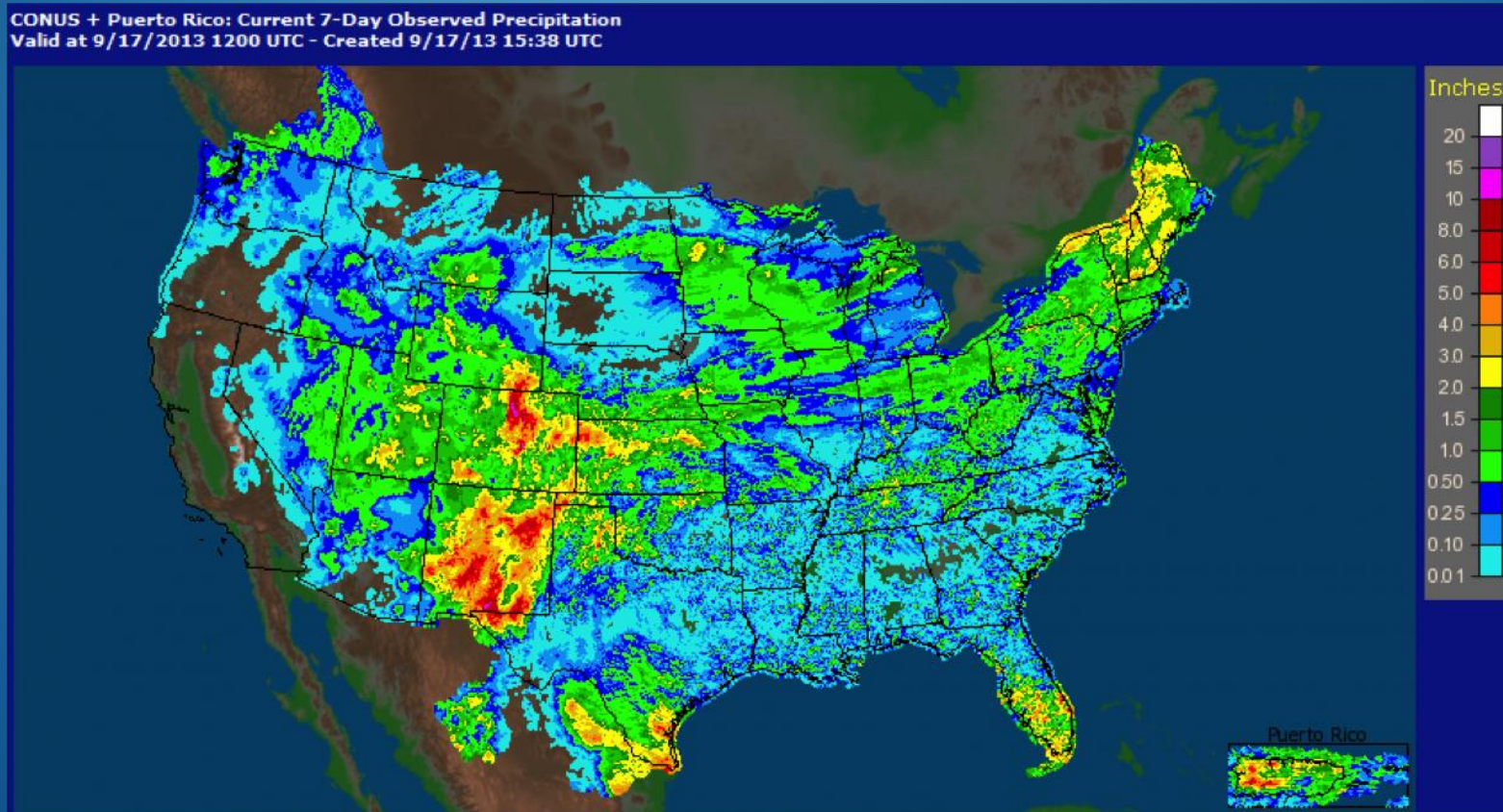
Note: All times are approximate

Flood Mitigation Efforts & Field Update

Jeff Walterscheid

Observed precipitation for the continental United States for September 10-17, 2013

Los Alamos County received between 200% and 600% of the normal precipitation for this time period.



Sequence of Events

- Flooding in Los Alamos County Friday, September 13, 2013
- Site inspection of access roads, site monitoring areas (SMAs), gages, watershed controls, and equipment completed October 1, 2013
- Government shutdown October 2-21, 2013
- Flood assessment completed in November 2013
- Additional annual site assessment completed November 2013
- 133 SMAs and 26 gage locations were identified requiring various levels of maintenance

Sequence of Events

- Canyon access roads requiring maintenance were identified
 - Watershed controls were identified requiring routine maintenance
 - Prioritized recovery work
- ✓ Winter weather is usually a limiting condition for field work - took full advantage of mild winter to expedite recovery efforts

Pueblo Canyon September 13, 2013



Access Roads

- Following the September 13, 2013 rain and flood event preliminary canyon access road inspections were completed
- Maintenance was completed to allow for light duty truck traffic
- Future access road improvements will be project specific



Mortandad Canyon

Gage Stations

- Repairs where warranted have been completed at most locations
- Long term impacts expected from recent fires and flooding in upper watersheds
- Site assessments are ongoing following rain events



E204

Site Monitoring Areas

- Flood recovery activities were completed ahead of schedule at 133 SMAs
- Recovery efforts varied from replacement of rock check dams to berm/spillway repairs
- Routine maintenance is ongoing



2M-SMA-2

Watershed Controls

- Approximately 7,000 cubic yards of sediment were removed from the Los Alamos Canyon weir and stabilized in an upstream borrow pit
- The Los Alamos Canyon ponds required minor spillway repairs
- Minor maintenance was completed at the Pueblo Canyon grade control structure, additional maintenance will be completed during the E060.1 gage repairs scheduled for later this summer



LA Canyon ponds

2014 Field Status

January-June

- Mild winter and spring allowed for the continuation of field work
- Flood recovery efforts to date:
 - SMA work is 100% complete
 - Gage work is 75% complete
 - Watershed controls are 90% complete
 - Access road work is 100% complete
- Enhanced control installations ongoing
- Routine Best Management Practice (BMP) inspections and maintenance are ongoing following a qualifying storm event
- ✓ Summer monsoon rains are expected to start in early July

Challenges Completing Field Work

- Seasonal restrictions
 - Snow and ice, lightning, red flag conditions
 - Endangered species
- Health and safety issues
 - Accessibility
 - Site specific hazards
- Cultural issues
 - Archaeological sites
 - Historical sites/trails
- Property ownership
 - Access agreements

Control Measures

Routine Maintenance

- Based on site inspection results following a qualifying storm event
 - 207 rain event inspections completed during first six months of 2014
 - 12 work orders for routine maintenance have been issued and 11 have been completed as of June 30, 2014

Corrective Action

Enhanced Controls

- Based on monitoring results, SMAs with confirmation samples exceeding TALs are visually inspected and all existing control measures are re-evaluated
- Nine SMAs had enhanced controls installed and certified
 - CDV-SMA-1.4
 - CDV-SMA-2.41
 - CHQ-SMA-1.03
 - F-SMA-2
 - LA-SMA-5.51
 - PRATT-SMA-1.05
 - PT-SMA-1.7
 - S-SMA-0.25
 - T-SMA-1

LA-SMA-5.51



F-SMA-2



PT-SMA-1.7



S-SMA-0.25



CDV-SMA-1.4



CHQ-SMA-1.03



Questions?



Location Unavailable.

Thanks!

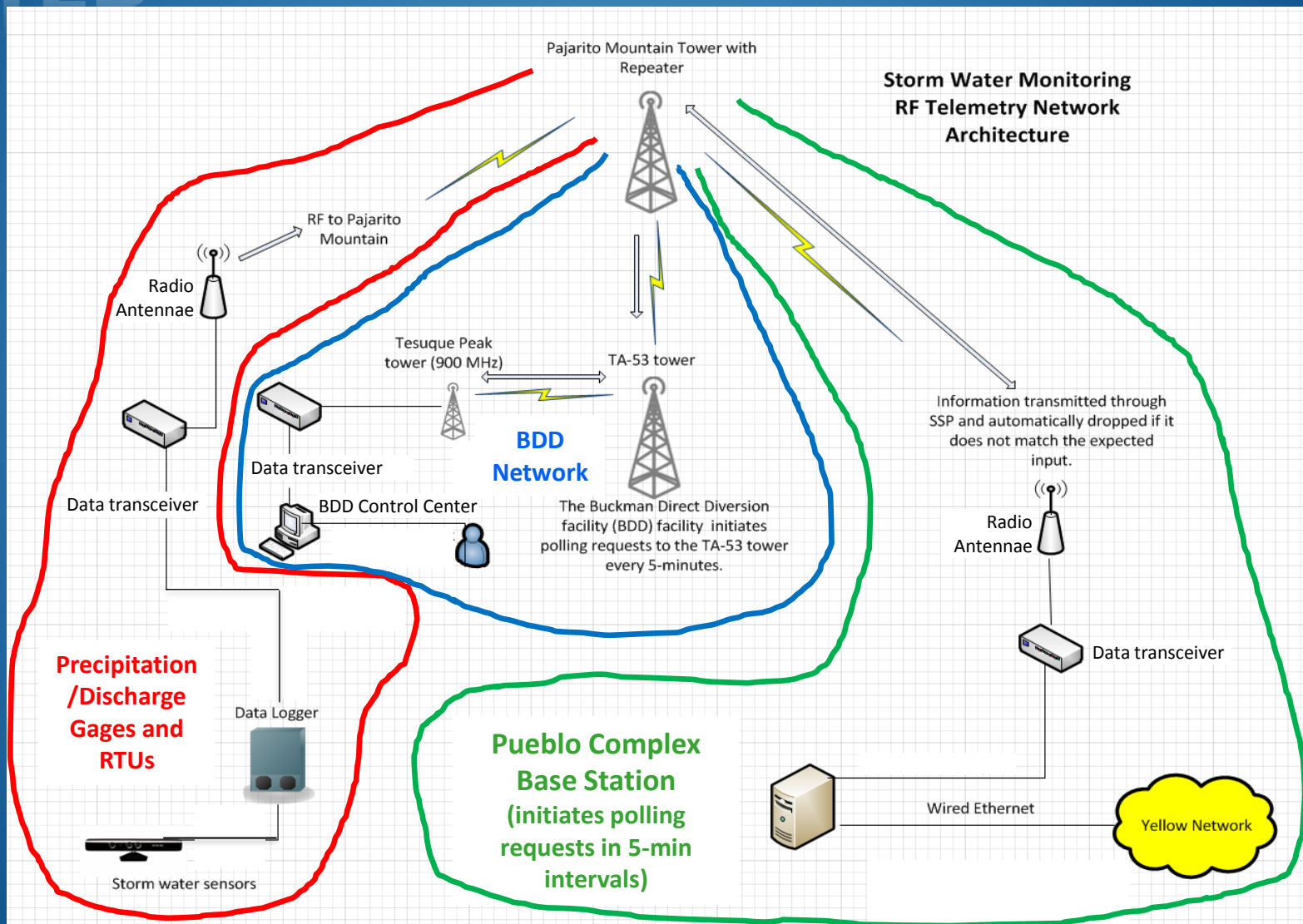


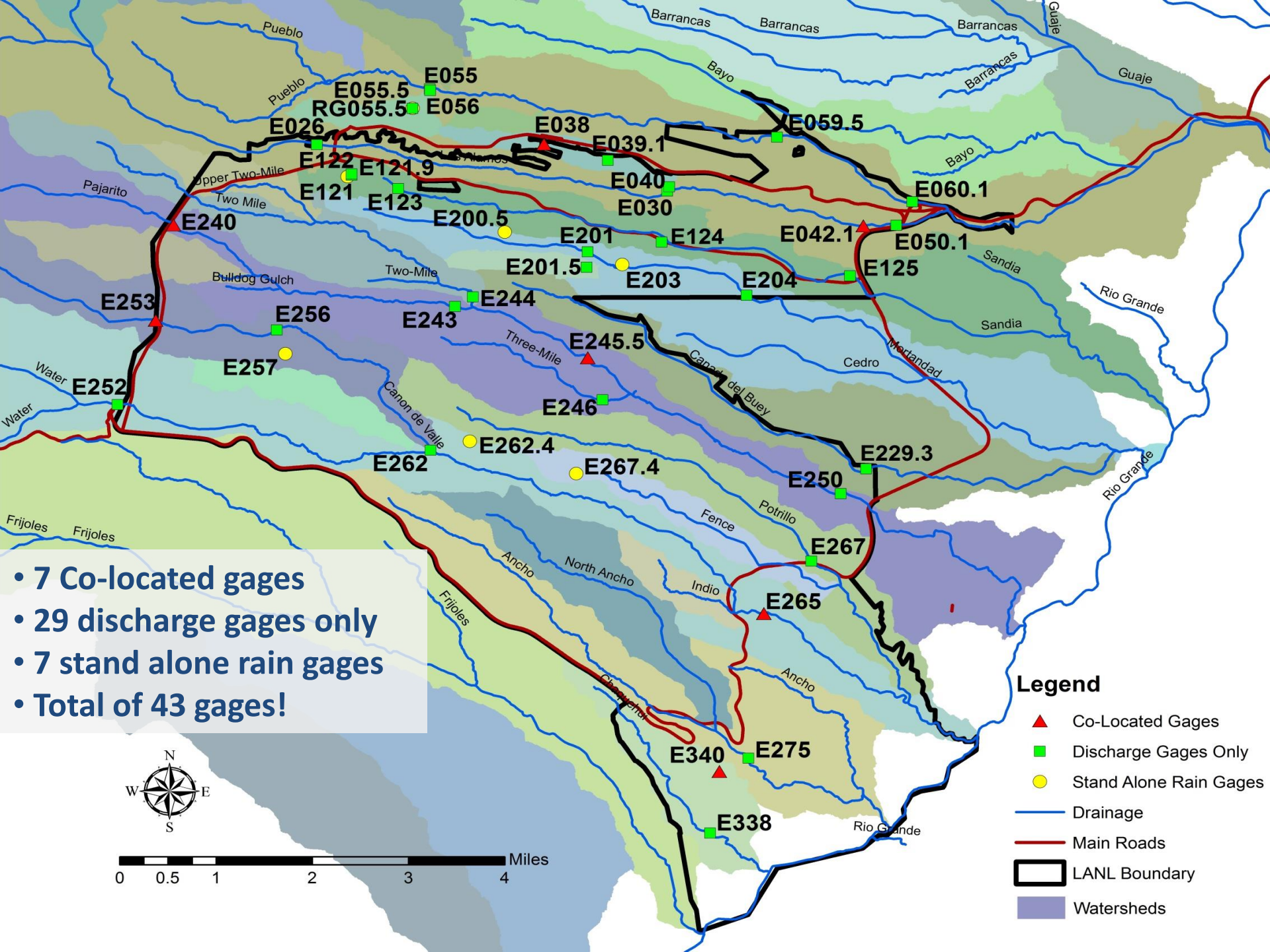
Location Unavailable.

Canyon Gage Station Network

Amanda White

Telemetry Network





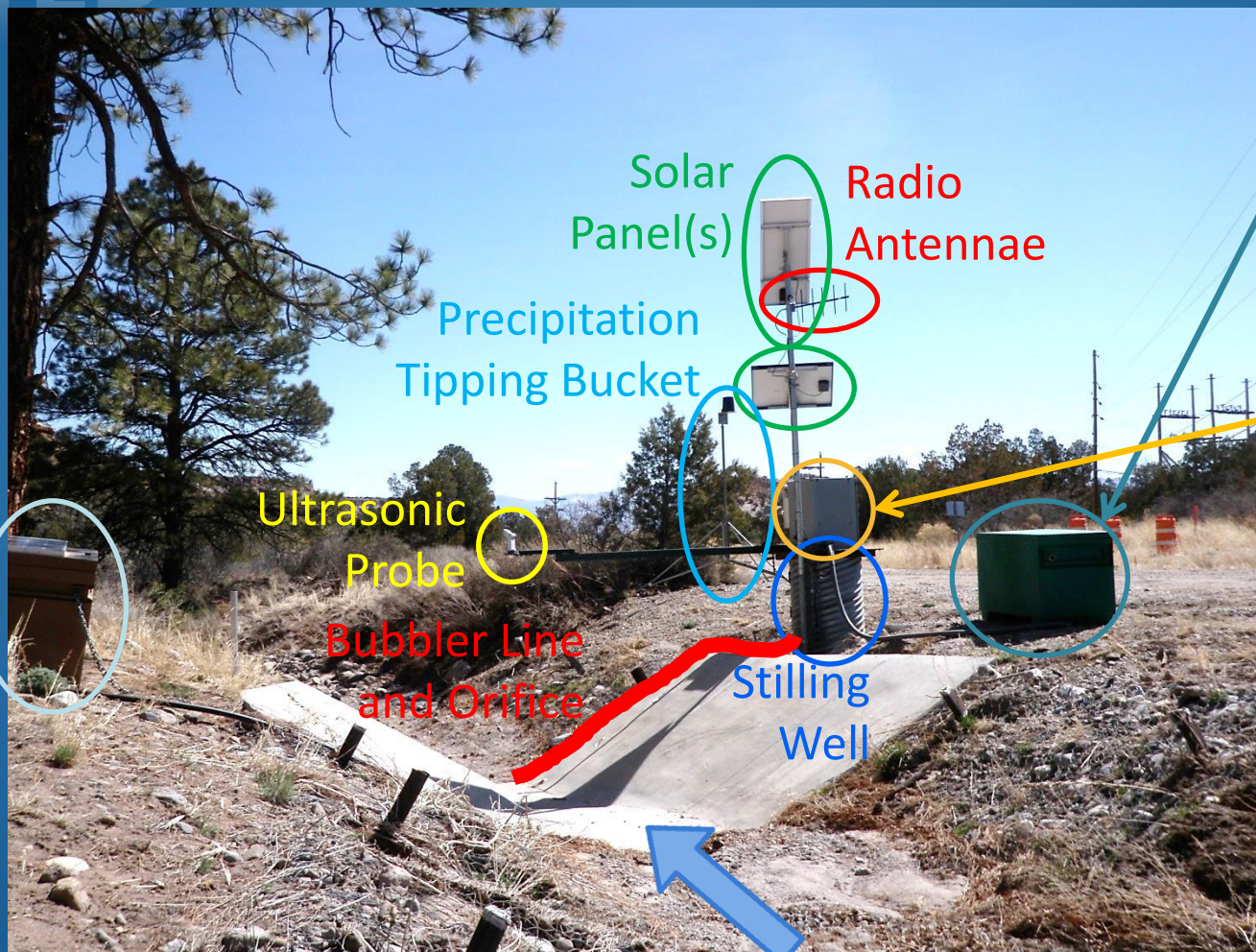
- 7 Co-located gages
- 29 discharge gages only
- 7 stand alone rain gages
- Total of 43 gages!

Legend

- ▲ Co-Located Gages
- Discharge Gages Only
- Stand Alone Rain Gages
- Drainage
- Main Roads
- ▭ LANL Boundary
- Watersheds



Canyon Gage Station E042.1



NMED's
Co-located
Sampler(s)

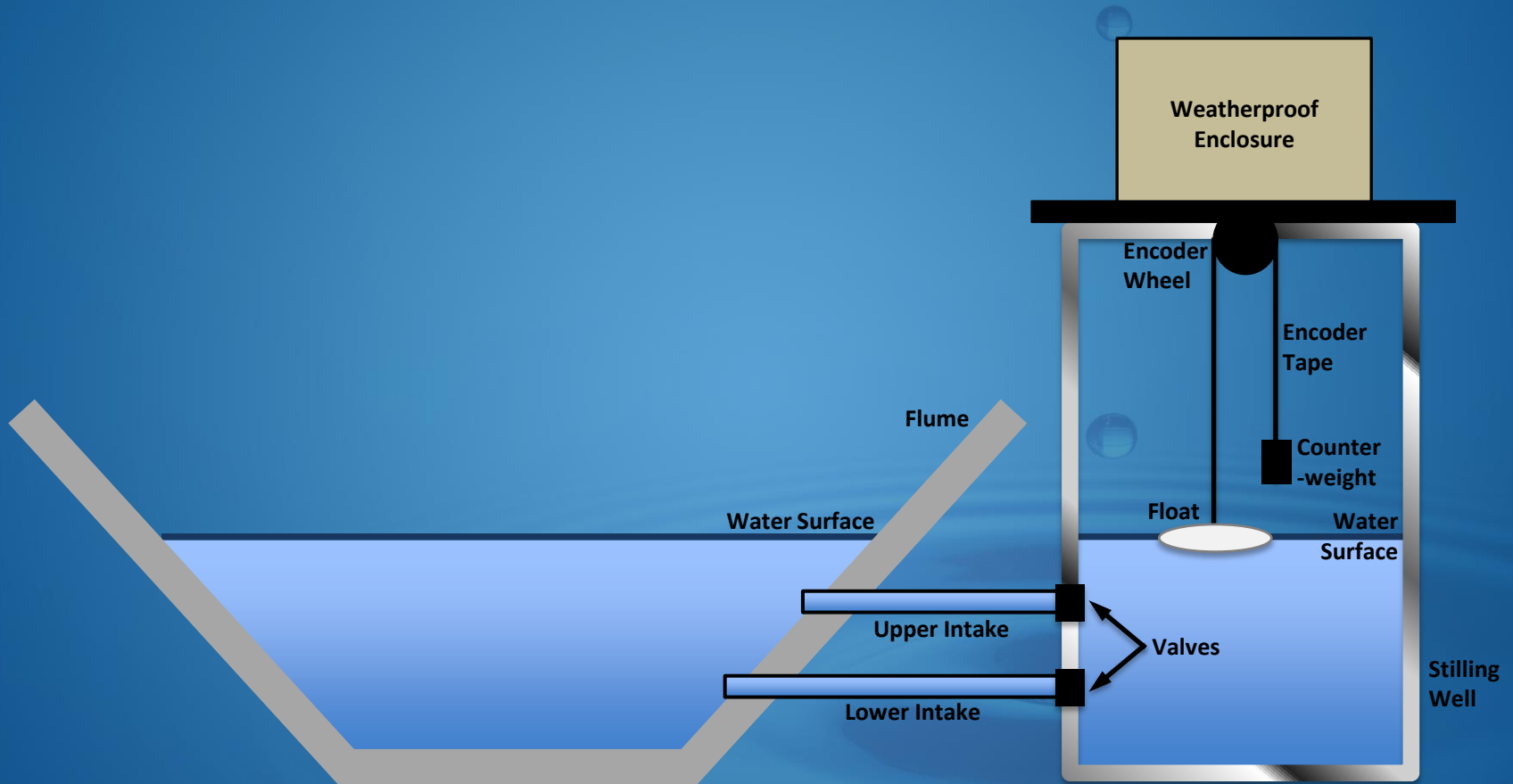
Automated
Sampler(s)
and Batteries

Weatherproof
enclosure
contains:

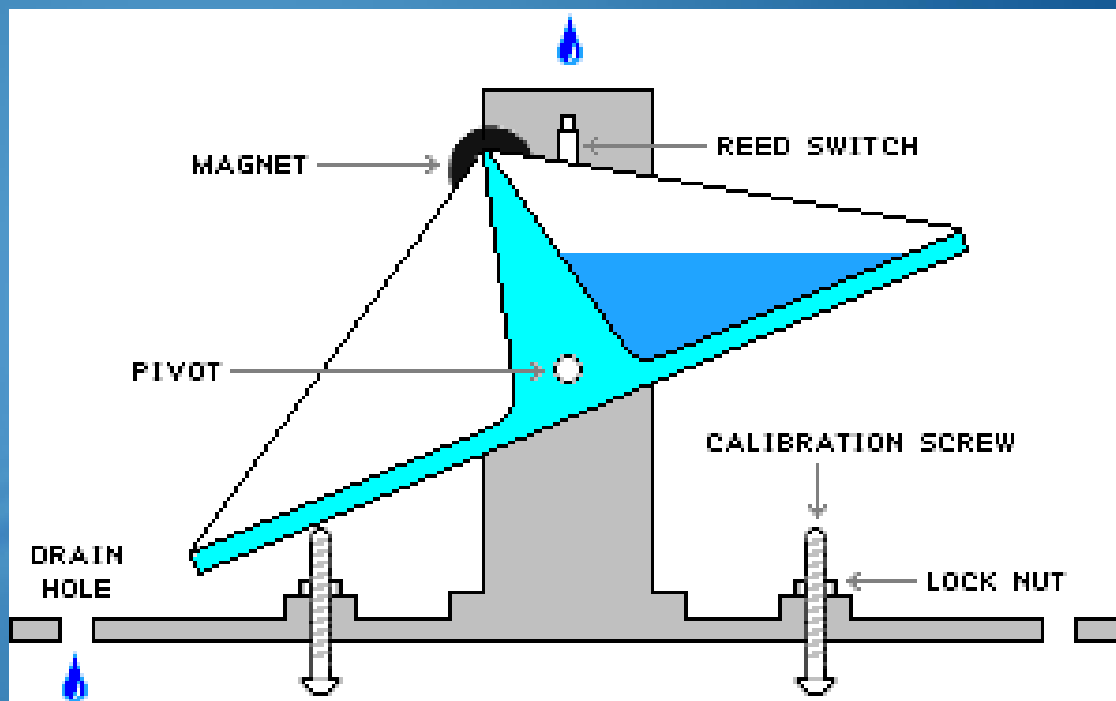
- Datalogger
- Electrical panel
- Bubbler transducer

Direction of flow

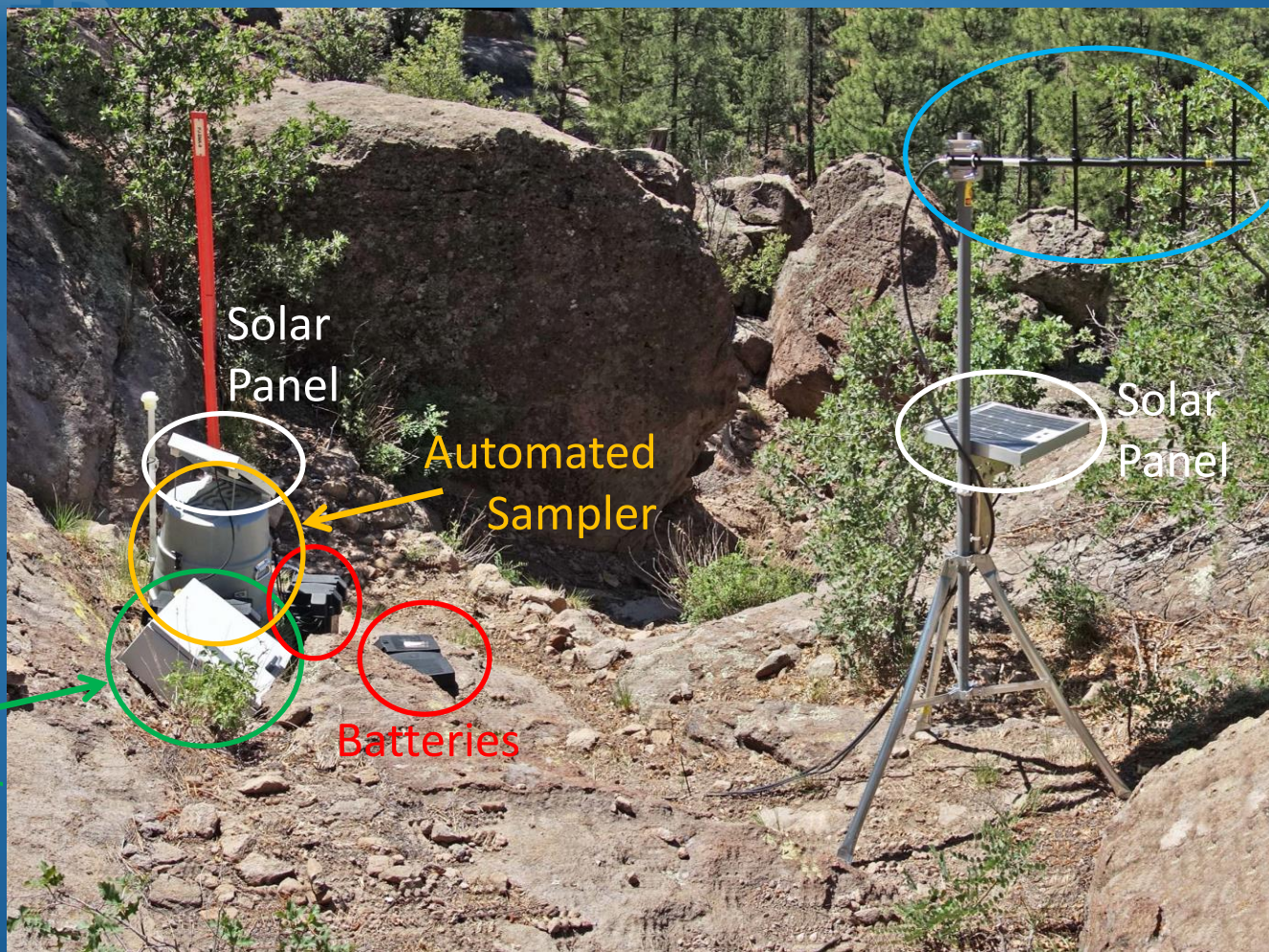
Encoder/Stilling Well Design



Precipitation Gage Tipping Bucket



Remote Telemetry Units (RTUs)



Radio
Antennae

Solar
Panel

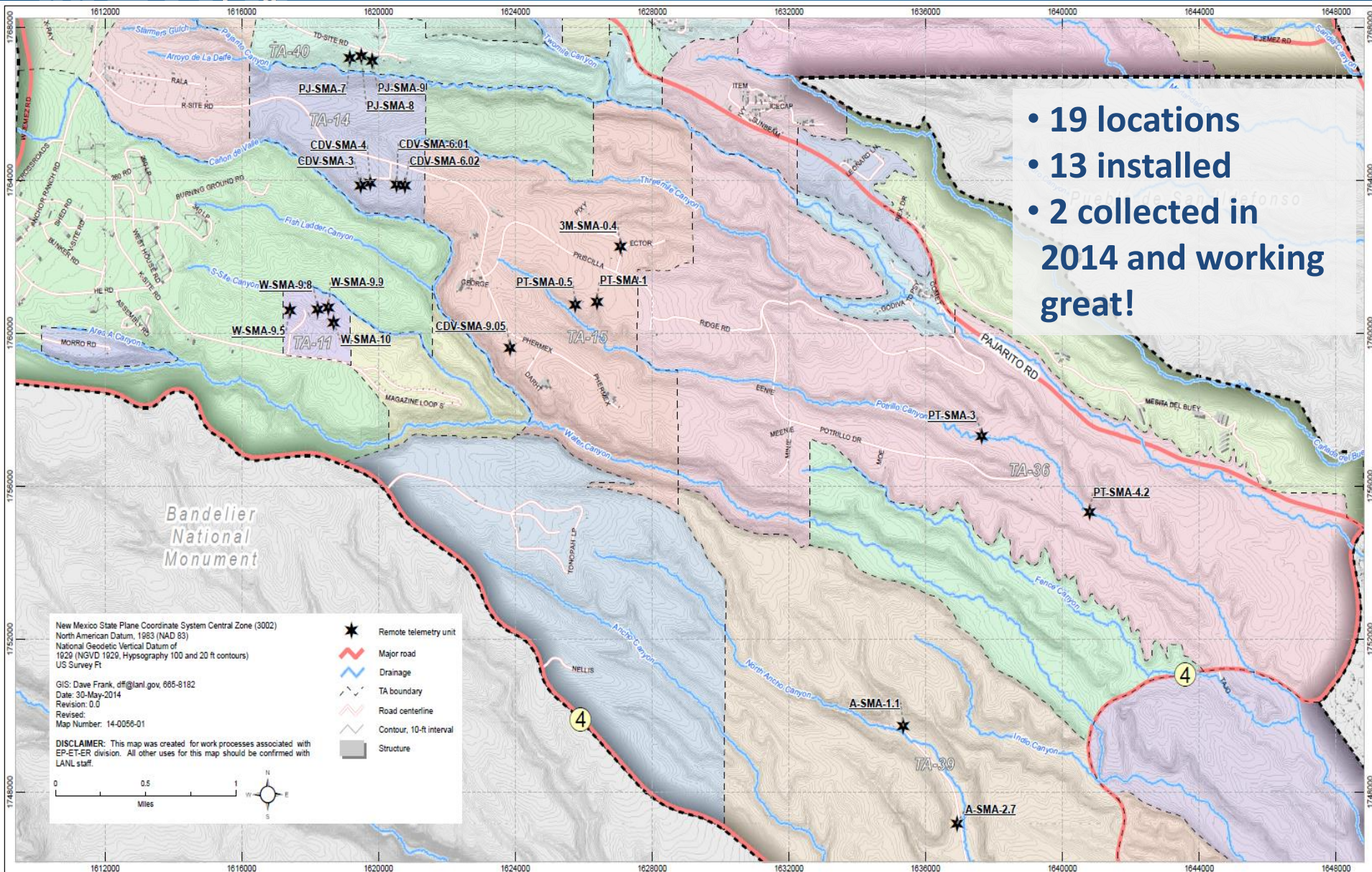
Automated
Sampler

Solar
Panel

Batteries

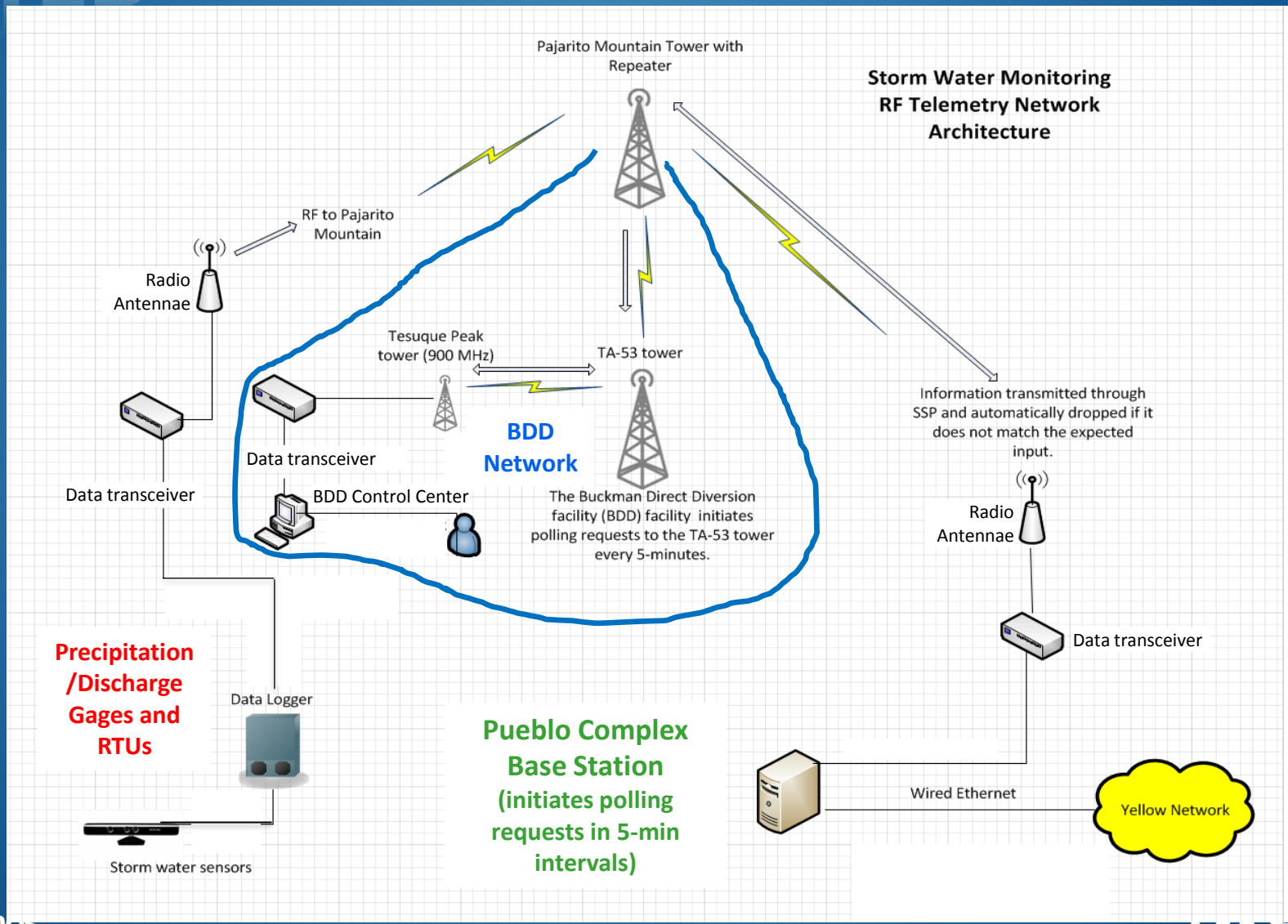
Weather-
proof
Enclosure for
Datalogger

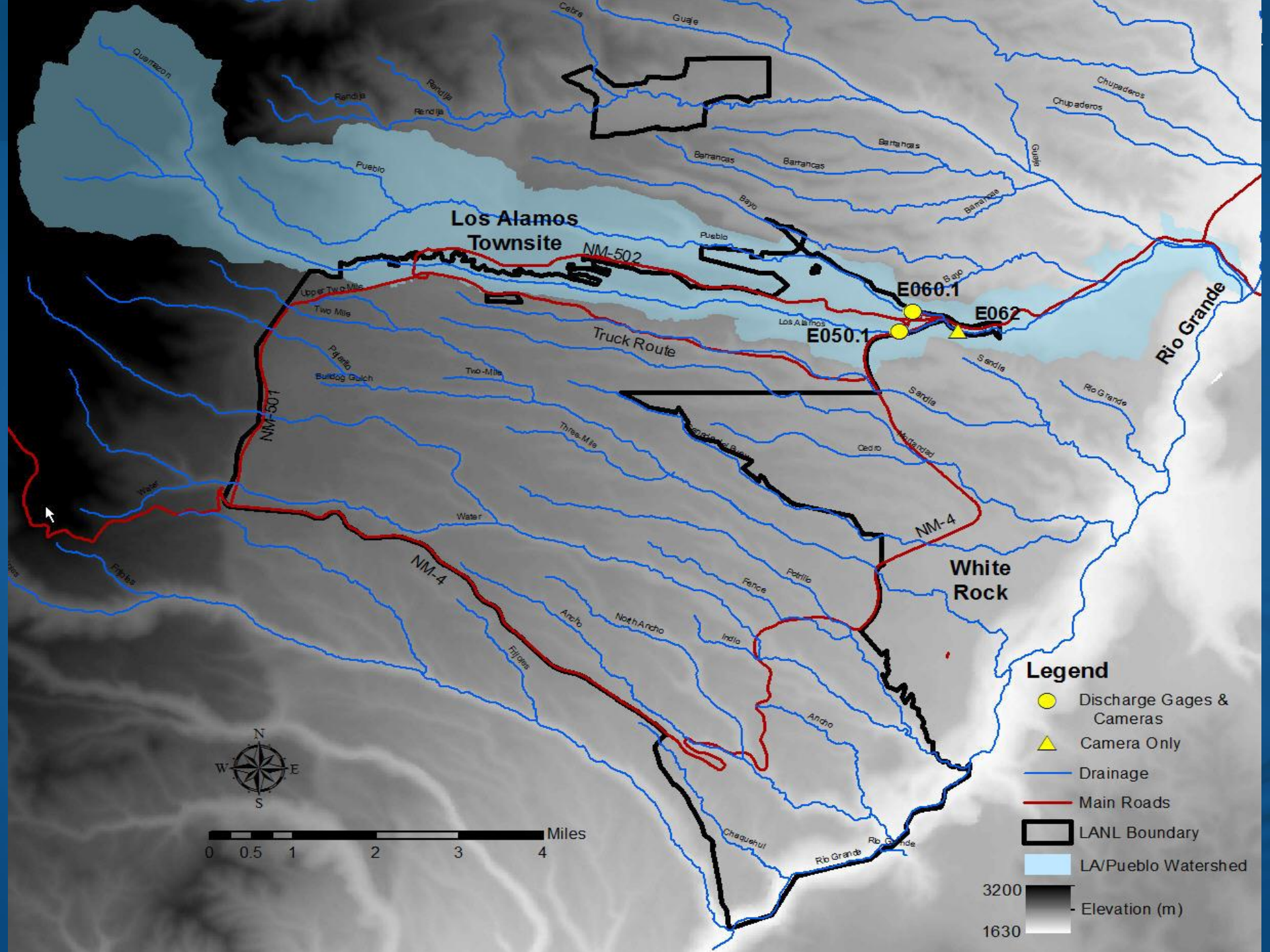
RTU Locations



- 19 locations
- 13 installed
- 2 collected in 2014 and working great!

Telemetry Network





- Legend**
- Discharge Gages & Cameras
 - ▲ Camera Only
 - Drainage
 - Main Roads
 - ▭ LANL Boundary
 - LA/Pueblo Watershed
 - Elevation (m)
- 3200
1630

E050.1



E060.1



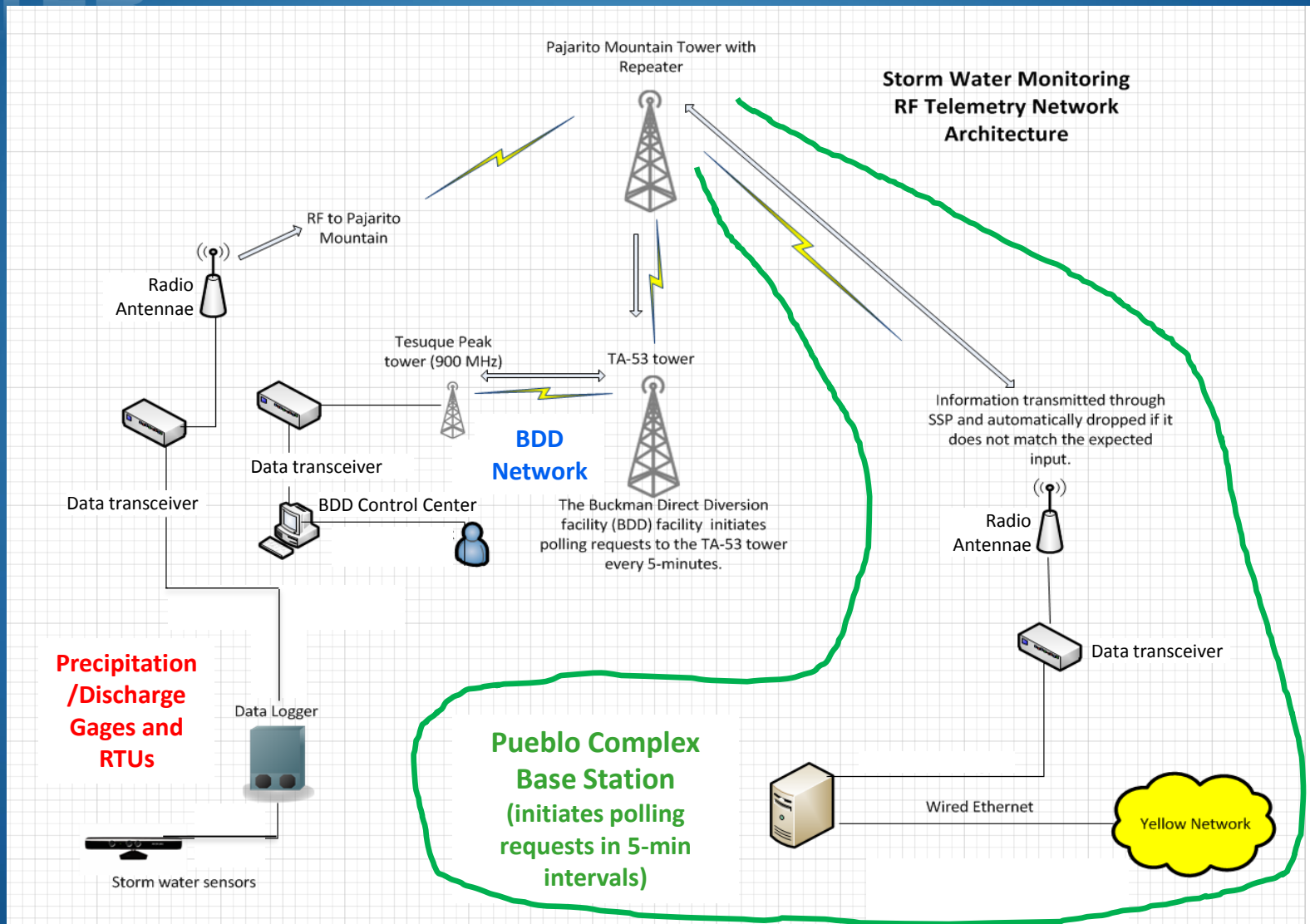
E062

+85.8F

2014-07-03 MDT 13:55:02



Telemetry Network



Pueblo Complex Base Station



Individual Permit Renewal

Steve Veenis and Kate Lynnes

Original IP Application

- Initial permit application submitted 2005
 - Permit the result of a settlement agreement following a Clean Water Act-FFCA lawsuit
- Effective date of permit November 1, 2010; expires March 31, 2014
 - Unique NPDES permit
 - 405 sites considered point-source discharges
 - Sites are a subset of solid waste management units (SWMUs) and areas of concern (AOCs) in the Consent Order
 - Storm water compliance monitoring done in sub-watersheds or SMAs

Original IP Application

- Site selection process was very conservative
 - Three criteria for identifying site
 - Are significant industrial materials present?
 - Are these materials exposed to storm water?
 - Can these materials potentially impact receiving stream water quality?
 - Soil and storm water data were limited at the same time sites were selected for the IP

Leading up to the IP Renewal

- What have we learned since 2005?
 - Consent Order soil investigations provide better understanding of significant industrial materials at sites
 - Consent Order data show that most sites don't have such materials exposed to storm water
 - Three years worth of storm water data
 - Contaminants detected recurrently are typically Lab-wide, natural background (e.g. gross alpha and Al) or urban, non-point runoff (e.g. PCBs, Cu and Zn)
 - Two background storm water reports (metals and PCBs)
 - Many sites identified as high priority for PCBs don't have PCBs

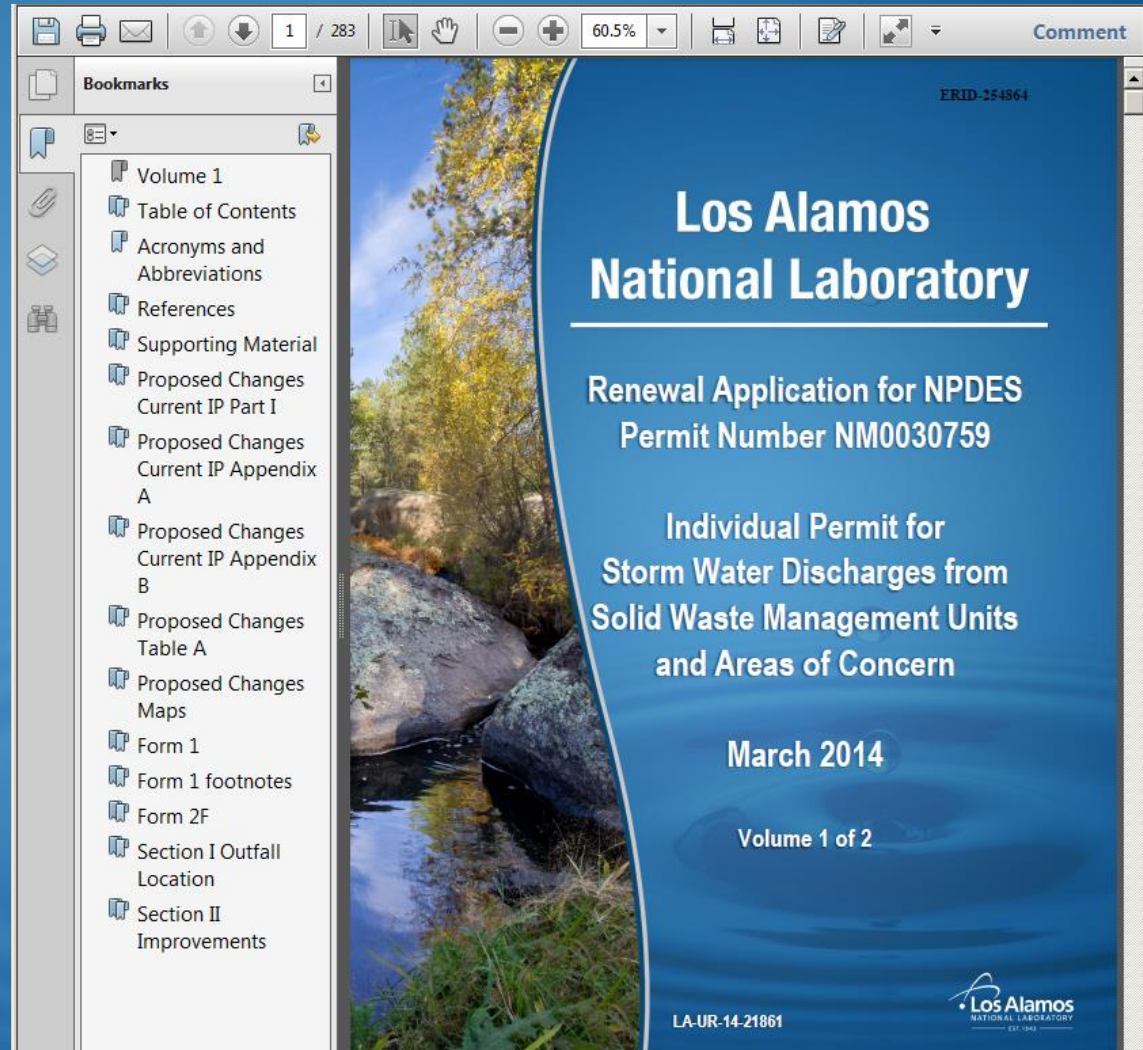
IP Renewal Application

- Submitted a renewal application package to EPA on March 27, 2014
- Available on the public website

The screenshot shows the Los Alamos National Laboratory website. At the top, there is a navigation bar with links for 'About', 'Mission', 'Business', 'Newsroom', and 'Phonebook', along with a search box. The main header features the laboratory's name and tagline: 'Delivering science and technology to protect our nation and promote world stability'. Below this is a secondary navigation bar with categories: 'Science & Innovation', 'Collaboration', 'Careers, Jobs', and 'Community, Environment'. A breadcrumb trail reads: 'Community, Environment » Environmental Stewardship » Environmental Protection » Obeying Environmental Laws » Individual Permit » Renewal'. The main content area is titled 'Individual Permit Renewal Application' and contains the text: 'The Permit expires March 31, 2014 and existing permit conditions will be in effect until a new permit is issued. The Permittees submitted a renewal application to EPA on March 27, 2014.' Below this text is a 'CONTACT' section for 'Environmental Communication & Public Involvement' with an address and phone number. A central orange box highlights the 'March 27, 2014, NPDES Permit No. NM0030759 Individual Storm Water Permit Renewal Application' with a list of downloadable documents: Letter (pdf), Document; Volume 1 of 2 (pdf), Plate 1; Volume 1 of 2 (pdf), Plate 2; Volume 1 of 2 (pdf), Plate 3; Volume 1 of 2 (pdf), Plate 4; Volume 1 of 2 (pdf), Maps; Volume 1 of 2 (pdf), and Document; Volume 2 of 2 (pdf). On the right side, there are social media icons and a list of links under the heading 'INDIVIDUAL PERMIT', including 'Site Discharge Pollution Prevention Plan (SDPPP)', 'Site Monitoring Area Maps', 'Reports', 'Construction Certifications', 'Corrective Action', 'Alternative Compliance', 'Miscellaneous EPA Submittals', 'Public Meetings', and 'Renewal Application'.

IP Renewal Application

- The PDF file is bookmarked for easier navigation



IP Renewal Application

- What's in that package?
 - Supporting material: overview of the permit renewal application
 - Proposed changes: redline-strikeout of permit text and appendices
 - Standard NPDES forms: forms 1 and 2F
 - Site drainage maps
 - Lists of BMPs and other controls
 - Updated narrative descriptions of each site
 - Discharge info from IP samplers

IP Renewal Application

- Current corrective action toolbox:
 1. Achieve target action levels (TALs)
 2. Total retention of storm water discharges
 3. Eliminate exposure to storm water
 4. Achieve RCRA “corrective action complete” status or receive certificate of completion from NMED
- Proposed changes to toolbox
 - Define a design storm for total retention (2)
 - Add NMED-approved site investigation reports and RCRA clean closure certifications (4)

IP Renewal Application

- Proposed changes to Appendix B
 - Goal was to refine the list of monitoring constituents
 - Tables 7 and 8 of supporting material show how constituents were selected
 - Used Consent Order soil data from top three feet to determine if a constituent is present above the background or residential soil screening level (SSL)
 - Next step was to look at storm water data
 - Then added and subtracted constituents as appropriate
 - See proposed changes for redline-strikeout of the Appendix B table

IP Renewal Application

- Proposed changes to sampler locations
 - Goal was to make sampler locations more representative
 - For sites with significant industrial materials, Consent Order soil data along with current sampler locations were mapped and evaluated
 - Possible outcomes for site by site evaluation:
 - No proposed changes
 - SMA boundary enlarges or reduces and sampler moves
 - Proposed additional sampler within SMA
 - See supporting material section 10.6 for description and proposed changes for new maps

IP Renewal Application

- Additional proposed changes
 - Streamline reporting requirements
 - Updating the high vs. moderate priority site status

IP Renewal Application

- What happens next?
 - Current permit stays in effect until the new one is issued
 - EPA will publish draft permit for public comment
 - Anticipate a draft permit in late 2014
 - At CCW's request, working to schedule a joint meeting with EPA, NMED, LANL and CCW prior to issuance of the draft permit

QUESTIONS?

Wrap-up