Co-Directors' Message

Season’s Greetings,

We are pleased that many of our Advisory Board members were able to virtually attend our November meeting and thank each of you for your attendance and participation. In addition to our Center and Clinic updates (thank you students for introducing yourselves and sharing your backgrounds), a very intriguing panel session, *Perspective on thinning and the use of wood products in Arizona; issues with scaling up*, featured Don Falk, Professor School of Natural Resources and the Environment, University of Arizona, Doyel Shamley, Apache County Supervisor and James Voyles, Of Counsel at Lewis and Roca. A summary of the entire meeting, along with links to slides and recordings, is below. Also in this edition, Jeff Eisenberg provides a Summary of Key Provisions of the Infrastructure Bill of...
Particular Interest to Arizona and Anne Gondor gives us Issue three of the Regulatory Round-up.

We wish you health and happiness as we move into the holiday season!

Best wishes,

George and John,
Co-Directors

Clinic Director’s Update
Priya Sundareshan

The Natural Resource Use & Management Clinic is closing out the Fall 2021 semester having had a number of exciting opportunities, both in-class and outside of class. We were able to have class in-person while wearing masks, and happy to be able to take a few more field trips this semester, now that we are more comfortable with pandemic precautions. We are now working on wrapping up our clinic projects for the semester and discussing the results with the clients.

Our field trips included a visit to one of the Gila River Indian Community’s managed aquifer recharge facility, an excursion coordinated by the UA Water Resources Research Center, to observe how the tribe is using their Colorado River allocation to benefit the state as drought conditions persist as well as restore the underlying aquifer. We also visited the Santa Rita Experimental Range to observe projects supervised by Prof. George Ruyle, particularly the research in cooperation with the nearby rancher on “virtual fencing” of cattle using remotely managed collar devices. We were fascinated by the possibilities of this technology and their potential to solve multiple problems, including ranch management and environmental issues.
The students also heard from many interesting guest speakers over the course of the semester. We heard from James Voyles, Of Counsel at Lewis Roca law firm, about his experience now and previously in the Department of Interior working on revisions to NEPA regulations. Former clinic student Ben Champion joined us to discuss his work on a Department of Energy fellowship with the Arizona Corporation Commission, highlighting the importance of utility regulations to provide electricity for Arizonans while exploring how to remedy the injustices of failing to deliver electricity to native communities. On our final class day, we were visited by Jennifer Diffley, partner at Culp & Kelly, and her colleague Ana Olaya to discuss their work to develop a Blue Bank to fund projects to conserve water and restore watersheds, as well as Amy McCoy of the consulting firm Martin & McCoy to talk about their report outlining strategies to better manage the Colorado River basin.

I am glad to have had an excellent class of students this semester, and look forward to relaxing a bit over the holidays!

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**Summary of Advisory Board Meeting**

The Fall NRULPC Advisory Board meeting was held November 16th, via Zoom.

The Center’s overall mission is to help landowners, farmers, ranchers & miners in Arizona navigate the legal and regulatory hurdles in using the land.

The Center strives to benefit the natural resource community by:

- Exposing our students to the complex natural resource laws and policies matters through the NRUM Clinic – examples of “learning by doing”
- Increasing the law and policy analysis capacity of Cooperative Extension to serve natural resource users
- Building partnerships amongst natural resources users and the larger community
- Offering a public interest Natural Resources Use and Management Clinic to serve stakeholders and engage students
- Helping stakeholders in Arizona and the West solve their legal hurdles

Jeff Eisenberg, Landowner Specialist for NRULPC, provided an overview of Center projects he has worked on such as drought-influenced stocking rates, comments on a new rule governing WOTUS, working with the San Carlos Irrigation and Drainage District, assisting Forest Service grazing permittees, assisting a stakeholder to obtain federal funding in response to destruction from Telegraph fire and potential rancher liability on state lease land.

John Lacy covered the available online training programs such as courses on Developing Public Lands Under the National Environmental Policy Act, Public Land Use, current topics and the undergrad courses on Natural Resource issues that are in the planning process for the new School of Mining and Mineral Resources.

Panel Discussion Summary
Three speakers participated in the panel discussion on Perspective on thinning and the use of wood products in Arizona: issues with scaling. Don Falk presented on Forest ecology and resilience: how will our forests recover?, Doyel Shamley spoke on Forest timber sale volumes, acres treated, increasing fuel loads and the impacts to our National Forests in Arizona and James Voyles finished the presentations with NEPA, Regulatory Reform, and Active Forest Management. A summary of the panel discussion in another article in this newsletter.

Clinic, Undergraduate Course and Financial Updates
Priya Sundareshan, clinic director, gave an overview of the clinic structure and projects. Seven students are currently enrolled in the clinic – six JD and one MS student. In addition to weekly seminars each student is working on an individual project which may include meeting with clients and community members. Students also participate in field trips to see real world situations. Students are also encouraged to create a blog post for the Western Lands Blog.
Anne Gondor, co-instructor for the Agriculture, Environmental and Legal Issues Course (ACBS/RNE/LAW 411), reiterated the overall purpose of the course – *to present a balanced view from the resource users’ perspective and promote law as a career option to student working on degrees associated with natural resource use*. The class will be held in-person (with Zoom as needed) in the Spring semester, 2022. Eighteen guest speakers are currently planned.

Each attending Advisory Board member was asked to introduce themselves and describe a current natural resource issue they are working on or are concerned about.

A financial and campaign update was given by George Ruyle. We receive steady support from Cooperative Extension, the College of Agriculture and Life Sciences and the College of Law. We are attempting to raise $50,000 for the Campaign, and thanks to a few individual and corporate contributors, have raised $14,500. We have received CARES money which is capacity support for the Center from the Governor's office (just for this next year, not long-term support money) and have also received money from the state legislature (Senate Bill 1825) authorizing the Center to provide pro bono assistance to small water use claimants in Arizona's general stream adjudication.

Several Communications outlets are available including our NRULPC website, newsletter, listserv, blog and a new resource called the Regulatory Roundup – a digest of current legal and policy issues in the news that are relevant to natural resource and land management topics. Several ideas were presented for better visibility of the Center to specific groups.

A request was made for the panel discussion to qualify for CLE credit. If you did not receive a CLE certificate please contact Anne Gondor.

A face-to-face meeting is requested for the Spring, but it will depend upon University regulations. The agenda, PowerPoint, meeting recording and panel discussion recording are available on the NRULPC website.

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**Panel Discussion Summary**
Anne Gondor

University of Arizona Professor, Don Falk (video start @ 3:18 m) discussed the policy dilemma created by using the term resilience in federal land management policy. The word has multiple meanings which hinders setting clear objectives for management. See (Falk 2016) for a deeper analysis of the “resilience dilemma.” He discussed the term as it applies to ecosystems, that are “rarely stable over time and space,” climate variability is always influencing how ecosystems function over long time frames decades to centuries. Many forest ecosystems evolved during the mini ice age (dates) a cooler time period. Influences on ecosystems are over months to a year or two decade timeframes; wildfire, insects, climate, storms, these all create instabilities and are not anomalies, they are how ecosystems work.

Falk predicted that many forest ecosystems will persist through changes in climate and not be as extensive as they once were within a few decades. Other areas will suffer mortalities, for example from large fires, but they will recover back to their original state, but an increasing proportion of the landscape is going to reorganize into ecosystems different from what was present. This has the consequence of losing carbon sequestration benefits as ecosystem type conversions occur away from forest types.

Panelist and board member Doyel Shamley (video start @ 22:00 m) commenting based on his experience with the Apache Sitgreaves National Forest, noted the many internal and interagency actions that create barriers to implementation of contracts even if funding is in place. These barriers impact the sustainability of industry tasked for thinning and removal. Examples included were:

- ADOT seasonal gate locks to forest roads on major highways are not accounted for in contract timelines
- Multiple two track roads created to circumvent locked roads
- ADOT budgets insufficient for maintaining roads in winter
- Changing postfire conditions, lack of staff to complete timely specialist reports and continuity of staffing hamper NEPA completion (also noted by
USFS Apache Sitgreaves follows public comment over their own scientific findings
Covid shutting down public meetings
Timber projects are proposed but never followed through (this is also an issue noted in (Fleishmann et al. 2020).
USFS staffing shortages and ability to hire (also noted in Schultz et al. 2021)
Post thinning forest maintenance insufficiently budgeted
Hauling costs, track distances, lack of fuel subsidies make it difficult for industry to bid on timber

Shamley also shared with participants a newly passed AZ House Bill 2714 that he helped revise to include the processing of biomass and forest industry products within definitions of environmental technology facilities.

The third and final panelist, James Voyles, Of Counsel with Lewis and Roca, (video start @ 42:00 m) presented on how NEPA regulatory reform relates to active forest management. Voyles reviewed the regulatory reform enacted by the Biden administration that will impact forest management. As of November 9, 2021, the administration had signed 67 executive orders 39 presidential memoranda 166 proclamations and 24 notices. He reviewed five orders that have the most potential for impact on natural resources. Three climate change executive orders focus on 1) tackling climate change at home and abroad, 2) public health and the environment and restoring science, and 3) financial risks; others focus on revoking previous executive orders that impact federal regulation and advancing racial equity of underserved communities. Voyles highlighted the emphasis the Biden administration is taking towards climate change, jobs and revitalizing lands as well as environmental justice.

Voyles chose 6 topics from the list of regulatory agenda items to discuss further: America the Beautiful and 30 by 30, Resource and Forest Management plans, NEPA, Environmental Justice, EPA enforcement and ESG reporting and enforcement.

Voyles reviewed how policies for 30 by 30 would be enacted through the forest resource management plans (RMP). These are 10-30 year plans that dictate how forest and field office territories are managed, determines what may be permitted. There are only a few RMPs in progress. Voyles notes that Resource Advisor Councils (RAC) advise and recommend aspects for managing lands and resources. Getting
involved in these RACs is one way resource users can get involved in the planning processes and help shape decisions made for managing those resources. He also reviewed aspects associated with NEPA and reform, and how new projects associated with these forest planning processes will require some level of NEPA whether it is an Environmental Assessment or a full blown Environmental Impact Statement.

Voyles said, “The concepts of Environmental Justice (EJ) process will permeate all agencies, EPA in particular has advanced types of enforcement for communities with EJ concerns”. This will include more monitoring audits and compliance checks, with mitigation and remedies. The Securities and Exchange Commission is implementing a Climate and Environmental, Social and Governance (ESG) Information Enforcement Task Force. SEC will enforce requirements for publicly traded companies to disclose climate and ESG factors.

To get more details and see the question and answer phase of the discussion (video start @ 59:00) or the entire panel discussion visit the NRULPC Events webpage or this Panel Discussion Video Link.

To dive deeper into these topics, see additional supporting information:


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**Summary of Key Provisions of the Infrastructure Bill of Particular Interest to Arizona**
Infrastructure Investment and Jobs Act
H.R. 3684, Public Law No. 117-58, signed into law November 15, 2021
$550 billion in new spending over 5 years. Categories of funding that may be of particular interest to Arizona which are included in the law:

**Roads, Bridges, & major projects, $110 billion**
Includes the Surface Transportation Reauthorization Act and Surface Transportation Investment Act. Funds new, dedicated grant program to replace and repair bridges and increases funding for the major project competitive grant programs.

**Power and Grid, $65 billion**
Funds for grid reliability and resiliency and support for aGrid Deployment Authority; critical minerals and supply chains for clean energy technology; key technologies like carbon capture, hydrogen, direct air capture, and energy efficiency.

**Resiliency, $47.2 billion**
Funds for cybersecurity to address critical infrastructure needs, waste management, flood and wildfire mitigation, drought and coastal resiliency, ecosystem restoration, heat stress, and weatherization.

- $3.37 billion authorized for the Department of the Interior and the Forest Service for wildfire risk reduction by providing funding for community wildfire defense grants, mechanical thinning, controlled burns, the Collaborative Forest Restoration Program, and firefighting resources.
- A new categorical exclusion under NEPA for fuel breaks and other forest management activities
- $300 million to the NRCS for the Emergency Watershed Protection Program

**Airports, $25 billion**
Funds for Airport Improvement grant program for runways, gates, & taxiways as well as a new Airport Terminal Improvement program for terminals, concessions, and multimodal connections. Improves Air Traffic Control infrastructure.

**Electric Vehicle Charging, $7.5 billion**
Funds for alternative fuel corridors and to build out a national network of electric vehicle charging infrastructure to facilitate long-distance travel and to provide convenient charging where people live, work, and shop.

**Addressing Legacy Pollution, $21 billion**
Funds to clean up brownfield and superfund sites, reclaim abandoned mine lands, and plug orphan oil and gas wells.
Safety, $11 billion
Funds highway & pedestrian safety programs, as well as pipeline safety and repair.

Public Transit, $39.2 billion
Funds nation’s transit system repair backlog, which DOT estimates is more than 24,000 buses, 5,000 rail cars, 200 stations, and thousands of miles of track, signals, and power systems. Expands transit systems, supports clean transit options, and increases accessibility for seniors and persons with disabilities.

Broadband, $65 billion
Grants to states for broadband deployment, makes broadband access more affordable for low-income families, expands eligible private activity bond projects to include broadband infrastructure, and supports middle-mile deployment efforts. Under the general program, the Department of Commerce will make grants to states for this purpose.

- $42.45 billion for grants to states for deployment
- $600 million for states to issue Private Activity Bonds to finance broadband deployment specifically for projects in rural areas
- $2 billion USDA support for loans and grants for broadband deployment in rural areas

Western Water Infrastructure, $8.3 billion
Funds for BOR western water infrastructure, including for aging infrastructure, water storage, water recycling and reuse, waterSMART, and drought contingency plans, among other things.

- $3.2 billion for aging infrastructure
- $1.15 billion for water storage, groundwater storage and conveyance projects
- $1 billion for water recycling and reuse projects
- $250 million for desalination projects
- $1 billion for rural water projects
- $500 million for dam safety projects
- $300 million for Drought Contingency Plan
- $400 million for waterSMART Water and Energy Efficiency Grants
- $100 million for Cooperative Watershed Management Program
- $250 million for Aquatic Ecosystem Restoration Program
- $100 million for multi-benefit watershed projects
- $50 million for Colorado River fish species recovery programs
Major Rehabilitation and Replacement Long-term Capital and Repair Needs for BOR projects in Arizona

This report was submitted to Congress in April 2021 to assist in determining the amount of funding needed by BOR to repair its existing infrastructure. At that time, BOR had 144 projects listed in Arizona as needing repair with an estimated cost of $348 million spread out over five years. The total estimated cost of repairs throughout the BOR system for the next five years is $4.6 billion. Fewer than 5% of the Arizona projects are of the highest priority according to the BOR.

Contact Jeff Eisenberg with questions or comments.

**2021 Mining Law Summit**

The Future of Mining Law

**Recordings**

The recordings for the 2021 Mining Law Summit held November 19, 2021 are now available!

**REGULATORY ROUND-UP**

*Issue 3 – December 30, 2021* (Will be on the NRULPC website soon)

**Highlights:**
- Solving the Wildfire Mitigation Quagmire
- WOTUS back to pre-2015 definitions
- Comment periods for Mexican Wolves and Arizona SIP
- Webinare to address land conflicts with wind and solar farms in farm country

See also

REGULATORY ROUND-UP

*Issue 2* - August 30, 2021
*Issue 1* – June 30, 2021

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We have become aware that some people are not receiving all the information we send out on the NRULPC listserv. Please add the listserv address to your email contact list so it does not go to spam/junk mail. Thank you!

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**New Resources on the NRULPC Website and Blog**

**Website**

- Industry Flyers
  - Our Work with Forestry
  - Our Work with Mining
  - Our Work with Public Lands Grazing
  - Our Work with Water
- Interior Board of Land Appeals
  - Sara Bassler 197 IBLA 280 (Decided October 19, 2021) (pdf)
  - Western Watersheds Project 197 IBLA 273 (Decided September 30, 2021) (pdf)
- Regulatory Roundup
  - Issue 3: December 30, 2021 *(coming soon)*

**Western Lands, Western Waters Blog**

- Investing in the American West: What Does the Infrastructure Investment and Jobs Act Mean for Us?
- Why Collaboration? The Gila River Indian Community's Innovative Partnerships
- Fighting Fire with Fire: Proposed legislation Would Address the Fire Deficit
NRULPC Website

The NRULPC website provides information on the center, student programs, leadership and staff, out publications and the Advisory Board.

Newsletter

The first issue of the NRULPC newsletter was released November 2017. It is published at various times of the year, but generally about every two months.

Blog

The Blog is our newest resource with our first release in April 2019. All posts carefully researched and written by NRULPC Clinic students.

Would you like to be on our NRULPC listserve? If so, please contact Sheila Merrigan.