Welcome, Introductions, Review Agenda
Joe Willis, Advisory Board Chair & Andy Groseta, Advisory Board Vice-Chair

- **Purpose:** “Highlight Center & Clinic activities, showcase students and gain input from the Advisory Board about future directions.”

Overview of NRULPC Progress & Funding - George Ruyle & John Lacy, Co-Directors

- The Center’s goal is to help landowners, farmers and ranchers in Arizona solve their legal and regulatory hurdles to using the land.
- The NRULPC is a collaboration of the University of Arizona’s James E. Rogers College of Law and the College of Agriculture and Life Sciences’ (CALS) Cooperative Extension System (CES).
- Established in 2016 as the first of its kind in the U.S.
  - Addressing unmet needs of the natural resource user’s community on law and policy topics for natural resource users.
- Current Projects for the Center
  - Analysis of Coronado National Forest Biological Opinion for the livestock grazing program
  - Analyses of new Waters of the United States (WOTUS) rule related to the scope of Clean Water Act enforcement
  - NEPA tutorial and handbook to help Extension agents best serve user interactions with federal agencies in getting projects authorized
  - Assessment and allocation of vacant grazing allotments
  - Liability of feedlot owners regarding research of animal pathogen contamination of leafy vegetables
  - Analysis of proposed NEPA revision
  - Analysis of proposed BLM grazing regulations EIS

Funding - George Ruyle and Karen Hollish, Director of Development

- Koch Foundation one-year grant received with possible renewal - $470,802
- Arizona Cattle Growers Association - $10,000
- Yavapai County Board of Supervisors - $5,000
  - AB members might consider asking their own county supervisors or other boards
  - Important to show support throughout the state
- Contributions from individual AB members
  - Very important because it shows other funders that there is broad support
  - Does not need to be large amounts

Clinic Activities - Priya Sundareshan, Clinic Director

- 3 JD students and 1 MLS student currently enrolled in Spring 2020
- 7 JD students were enrolled for Fall 2019
Additionally, 1 JD student did a hybrid internship/Clinic enrollment over Summer 2019 with Idaho Forest Group
  o Student internships are a great way to get students into field; if you have ideas for possible internships, please let the Clinic and Center know so they can circulate information to students and facilitate.

Clinic Structure
  o Weekly seminars: students meet in classroom, lessons on substantive law, project rounds, student presentations, guest lecturers, exercises
  o Individual projects: students work alone or in groups on projects for the NRULPC, Cooperative Extension, tribes, and other client organizations.
  o Weekly individual meetings with Director, in addition to meetings with NRULPC, clients, and University experts.

Example Clinic Projects – Fall 2019
  o NAU Forestry
  o Watershed restoration and land improvement via beaver dams
  o Waters of the United States project
  o How proposed rule will change permitting on the ground in Arizona
  o Student involvement: reviewing and summarizing the comments submitted by Arizona stakeholders
  o NEPA Handbook for Ranchers
  o Western Lands blog - [https://westernlandsblog.arizona.edu/](https://westernlandsblog.arizona.edu/)

Lessons Learned from the 2018 E. coli Outbreak Investigation & Efforts to Enhance Food Safety
Channah Rock, Associate Professor, Environmental Science and Extension Specialist

Understanding the outcomes of the Spring 2018 outbreak investigation and opportunities for enhanced research partnerships

Traceback identified 36 fields on 23 farms that could have been involved.
  • 130 Miles, 2 states
  • FDA/CDC reported Irrigation canal is most likely source of E. coli
  • FDA/CDC suggested that E. coli likely came from feedlot (feedlot samples tested negative, no obvious means for pathogen transport)

Outcomes:
  • FDA and UA collaborative effort to enhance food safety and support industry with SCIENCE
    o Environmental Microbiology Study in the Yuma Agricultural Region
  • FDA + UA + Industry Collaboration
Multi-year study focused on the environment in the southwest growing region.

Focal areas include:
- Surface waters (irrigation canals, ponds and reservoirs)
- Canal sediment
- Dust (aerosolization of pathogens specifically around animal operations)
- Animal intrusion/Native wildlife impact

Research Objectives
- Environmental surveillance
- Microbial ecology survey
- Method development

Forest Products and Yields and Travel Management Rule (TMR)

Doyel Shamley, Natural Resource Specialist/Intergovernmental Liaison for Apache County and NRULPC Board Member

<table>
<thead>
<tr>
<th>Apache-Sitgreaves National Forest (A-S)</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Total Fuels (Acres)</td>
<td>13,041</td>
<td>21,121</td>
<td>25,847</td>
<td>19,751</td>
<td>15,870</td>
</tr>
<tr>
<td>Thinning</td>
<td>1,358</td>
<td>18,296</td>
<td>15,561</td>
<td>21,618</td>
<td>31,124</td>
</tr>
<tr>
<td>Burning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Biomass extraction:
- has been averaging around 130,000 CCF annually.
- Growth rates exceed extraction rates by 400%

In Arizona forests, the annual growth is equal to the quantity necessary to build a 1,900 square foot home for 90,000 families.

Where do we go from here?
- Changes in State Statutes.
- “Certified biomass facilities”.
- Recruitment of Value-added industries.
- Recruitment of other biomass industries.
- Highway GVWR conformity.
- State Incentives for industry involving one-time expenditures and tax rebates.
- Promotion of new technologies.
- Rural Arizona energy catastrophes.

The Travel Management Rule; Designated Routes and Areas for Motor Vehicle Use (Federal Register)
- Revised regulations regarding travel management on National Forest System lands to clarify policy related to motor vehicle use including the use of off-highway vehicles.
- Maps of current open roads and proposed open roads (major reductions)

What is needed:
- Honest display of planning data for DEIS and REIS.
- Honest display of Mapping and GIS data in an easily used format.

Keynote Presentation – Beavers vs. Water Lawyers; Investing in restoration of degraded range lands

Peter Culp. Peter Culp, a UA Law graduate, is a nationally-recognized expert in Western water law and water policy and has more than 17 years of experience in water law and policy, natural resources law and policy, U.S. environmental law, and Federal Indian law (CK Blueshift – Culp & Kelly, LLP).
Jennifer Diffley is a Junior Partner with CK Blueshift – Culp & Kelly LLP, and practices in the areas of water and natural resources law, providing support to a variety of clients on environmental issues and water policy.

Liquid Assets Project: Primary Takeaways
- Focus of “impact investment” on private equity likely misplaced
  - Very early stage of market development; timelines too long and risks too high, investors seeking very high returns that are frequently counterproductive
  - Found many “investable” approaches, but only a few at risk/return levels or on timelines that would satisfy private equity
- Many places where new approaches to public financing or use of lower-return capital would work
  - Municipal - low levels of innovation, low risk tolerance, but potential for JBA, JPA, EIB bundling
  - Agriculture – too much emphasis on arbitrage models, few options for marginal areas, but potential for new value chains and urban/agricultural co-investment
  - Ranching – low margins, high land costs, intergenerational transition issues, but potential for restoration enterprise

Restoration Challenge:
- Incised Western stream channels
  - Beaver extirpation, grazing practices, other factors have assisted degradation
    - Downcutting, incised/gullied channels
    - Loss of shallow groundwater and bank/floodplain storage
    - Narrowing/loss of native riparian vegetation
    - Sagebrush, ponderosa pine, other upland species expand onto former floodplain areas
  - Beaver reintroduction … or mimicry?

UArizona Clinic support - Next Steps include:
- Partner with academic institutions to establish research sites to better quantify key benefits (fire risk reduction, natural storage/stream benefits, carbon, wildlife)
- Identify additional sites for demonstration-at-scale
  - Ideally, explore and establish nodes in appropriate landscapes in Arizona, California, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming.

Course Update - Joe Willis, Advisory Board Co-Chair
- Title: An introduction to Agricultural Law and Policy for the Modern Day Natural Resource User
  - First class of its kind for undergraduates
  - Co-taught by Joe Willis, Esq. and Anne Gondor (new instructor for this class this term)
  - Overall purpose to promote law as a career option to students working on degrees associated with natural resource use

Introducing Clinic Staff and Students - Priya Sundareshan, Clinic Director
- Colin McKenzie – Clinic Fellow
  - First day is today!
  - Background in groundwater hydrology, worked in mining sector
- Also worked in water law and policy after law school with Utton Transboundary Resources Center
  - Assisting Priya with Clinic activities including students
  - Writing position papers
- **Luke Erickson – Student**
  - Started this semester
  - Very interested in water law
  - Interned last summer with Special Water Master for the AZ General Stream Adjudication
- **Cora Varas – Student**
  - Started this semester
  - Ph.D. scientist – genetics and genome sequencing
  - Link science with law
  - Science based policy decisions
- **Braelan Barnett – Returning Student**
  - Previous semester Clinic focus on WOTUS
    - Clean Water Act (1972)
    - Evolution of the definition of “Waters of the United States”
    - Court Cases
    - Challenges to 2015 Rule
    - Select Changes in 2020 Rule
    - Exclusions
    - Problems
    - Interests and Values
    - Unifying Principles

**Communication Outlets & Requests for Participation - Sheila Merrigan**
- **NRULPC Website:** [https://extension.arizona.edu/nrulpc](https://extension.arizona.edu/nrulpc)
  - Leadership and staff
  - Student programs
  - Center projects
  - Newsletter and other resources
  - Advisory Board
- **Newsletter:** [https://extension.arizona.edu/nrulpc-newsletter-other-resources](https://extension.arizona.edu/nrulpc-newsletter-other-resources)
  - New format
  - Feature each board member; if you have not been featured, we need:
    - Bio & Photo
  - Advisory Board column
    - AB suggested in previous meeting
    - We need each of you to write a column
  - Listserv
    - General NRULPC: nrulpc@list.cals.arizona.edu
    - NRULPC AB: nrulpcab@list.cals.arizona.edu
- **Blog:** [https://westernlandsblog.arizona.edu/](https://westernlandsblog.arizona.edu/)
  - Student entries
- **Expertise Directory:** Internal use only
  - Update areas of interest and expertise (used for speakers & projects)
  - Update contact information
  - Bios, resumes & photo
Discussion topic: Past AB Discussions (2018-19) & Next Steps – George Ruyle and Barb Hutchinson

A summary of past Advisory Board feedback and suggestions was presented with a summary of how the Center and Clinic have responded. This was followed by a discussion of potential other options for engagement.

- **Role of Advisory Board**
  - Potential involvement in matters
  - Venue to discuss issues
    - Meetings
- **Outreach and Communications**
  - Clear subject lines in email communications
    - Current subject lines – have they helped?
    - Question about email addresses vs. listserv messages
  - Communications outlets
    - Newsletter (AB column)
    - Listservs (general and Advisory Board)
    - Website
    - Blog (at request of Advisory Board)
      - Students are posting (please subscribe)
      - Suggestion for Advisory Board members to add comments
- **Presentations to Students on Different Perspectives**
  - Class speakers from Advisory Board
  - Speakers at AB Meetings
- **Focus on Bigger Issues for More Impact**
  - Legal Memos & Papers
    - Water and Property Issues
    - Liability of Feedlots
    - Mega-fires in the Western U.S.
    - Federal Appeals Handbook
    - WOTUS Rule
    - NEPA Handbook Revision
- **Request for Monthly Email** with (1) status of litigations; (2) issues in news; and key federal & state policy issues
  - A Public Lands News subscription was begun and distributed to the AB, but the editor retired at the end of the year. Need to consider other options.
- **Fundraising**
  - Foundation grant received
  - Followed up with small donors
  - Grant proposals (Marley Foundation and Public Lands Council submitted)
  - Engage Development offices
  - Presentations were made around the state: Yavapai County Board of Supervisors; AZ Cattle Growers Assoc.; Western Farm Bureau; NAU School of Forestry; FOCUS (returning Vets); City of Superior Officials
- **Advisory Board Meetings**
  - Question of locations
  - Question of sub-groups meeting more often
  - Open house with corporations (CAT, John Deere, etc.)
  - Issues symposium
Discussion Summary and Action Items for Center, Clinic, and Advisory Board

Fundraising
- New priority is to endow the NRULPC
- Suggest all AB members make a request to their County Board of Supervisors documenting what it is doing for the community
- Work with legislators: Agriculture bills can divert up to 15% for natural resources
- Consider reaching out to corporations, i.e. Anheuser-Busch

Outreach and Communication
- Add County people on the Newsletter mailing list
- Give presentations to Extension
- Need to improve messages about important messages and get them out on the street
  - Consider other partners (Humanities?)
  - Consider hiring a communications/PR specialist

Science Informing Policy - Symposium
- Politics controls policy
- Need to get to the right people

Advisory Board Meetings
- Question about possibility of holding two in-person AB meetings per year
- Consider holding a smaller half-day event, i.e. symposium

Advisory Board Membership
- Need to recruit on tribal lands, including Veterans (Doyel can help)
  - Work with tribes on water issues
  - Council Sessions in the Spring – Navajo Nation; San Carlos Apaches; White Mtn Apaches

Wrap up, Thank Yous and Adjourn - Andy Grosetta

NRULPC Communication Outlets
- Website: https://extension.arizona.edu/nrulpc
- Newsletter: https://extension.arizona.edu/nrulpc-newsletter-other-resources
- Listservs for 1) Advisory Board & 2) AB+ interested persons
- Blog: https://westernlandsblog.arizona.edu/

Participants:
Advisory Board Members: Andy Groseta, Co-Chair; Joe Willis, Co-Chair; Matt Bingham; Tom Davis; Sandy Fabritz; Mia Hammersley; Kirk Johansen; Jeff Menges; Paco Ollerton; Carlos Ronstadt; Alan Seitz; Doyle Shamley; Stefanie Smallhouse; Celeste Steen; Bethany Sullivan
Advisory Board Members Unable to Attend: Linda Chezem; Ashley Ellixson; Sarah Lawson; Bill Plummer
NRULPC Staff: John Lacy, Co-Director; George Ruyle, Co-Director; Priya Sundareshan, Director, Natural Resources Use & Management Clinic; Colin McKenzie, Law Fellow, Natural Resources Use & Management Clinic; Jeff Eisenberg, Consultant; Barb Hutchinson, Communications Coordinator; Sheila Merrigan, Assistant Communications Coordinator
Other Attendees: Shane Burgess, Dean, College of Agriculture and Life Sciences; Megan O’Leary, Development Officer, James E. Rogers College; Karen Hollish, Development Officer, College of Agriculture and Life Sciences; Braelan Barnett, UA College of Law student; Cora Varas, UA College of Law student; Luke Erickson, UA College of Law student
Speakers: Channah Rock, UA Associate Professor, Environmental Science and Extension Specialist; Peter Culp, Attorney, CK Blueshift–Culp & Kelly, LLP; Jennifer Diffley, Attorney, CK Blueshift–Culp & Kelly, LLP
Special Guest: Emmett Sturgill, ACGA designate to the Public Lands Council