2013 Alta Ecological Assessment Symposium
Afternoon Brainstorming Session Minutes, September 14, 2013
Minutes by Chris Cawley, Friends of Alta

<table>
<thead>
<tr>
<th>Bourke, Roger</th>
<th>Town of Alta</th>
<th>Planning Commission</th>
<th><a href="mailto:rbourke@earthlink.net">rbourke@earthlink.net</a></th>
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<tr>
<td>Cawley, Chris</td>
<td>Friends of Alta</td>
<td>Bill Levitt Fellow</td>
<td><a href="mailto:chris@friendsofalta.org">chris@friendsofalta.org</a></td>
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<td>Clancy, Jen</td>
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<td>Collins, Amy</td>
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<tr>
<td>Crockett, Chris</td>
<td>Department of Natural Resources</td>
<td>Native Aquatics Biologist</td>
<td><a href="mailto:chris_crockett@utah.gov">chris_crockett@utah.gov</a></td>
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<td>Degiorgio, Joan</td>
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<td><a href="mailto:jdegiorgio@tnc.org">jdegiorgio@tnc.org</a></td>
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<tr>
<td>Fitzgerald, Liam</td>
<td>UDOT</td>
<td>Snow Scientist</td>
<td><a href="mailto:sta2449@utah.gov">sta2449@utah.gov</a></td>
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<td>Guildner, John</td>
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<td>Town Administrator</td>
<td><a href="mailto:jhg@townofalta.com">jhg@townofalta.com</a></td>
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<td>Hubbard, Marian L.</td>
<td>Salt Lake County Watershed Planning and Restoration</td>
<td>Watershed Scientist and Planner</td>
<td><a href="mailto:mhubbard@slco.org">mhubbard@slco.org</a></td>
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<td>Jones, Allison</td>
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<td>Conservation Biologist</td>
<td><a href="mailto:allison@wildutahproject.org">allison@wildutahproject.org</a></td>
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<td>Logino, Jack</td>
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<td>Entomologist</td>
<td><a href="mailto:jacklongino@gmail.com">jacklongino@gmail.com</a></td>
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<td>Utah Department of Agriculture</td>
<td>SL Compliance Specialist, Noxious Weed program</td>
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<td>University of Utah, Biology Dept</td>
<td>Forest Ecologist</td>
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<td>Pendergast, Mary</td>
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<td>Ecologist</td>
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<td>Mayor</td>
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<td>Tracy Aviary</td>
<td>Ornithologist</td>
<td><a href="mailto:mariacroav@gmail.com">mariacroav@gmail.com</a></td>
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<td>Shea, Pat</td>
<td>Friends of Alta / Univ of Utah</td>
<td>Legal Consultant / Biology Dept</td>
<td><a href="mailto:patrickashea@msn.com">patrickashea@msn.com</a></td>
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<td>Siloway, Skip</td>
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<td>Alpentech</td>
<td>Watershed Science</td>
<td><a href="mailto:e.vonallmen@utah.edu">e.vonallmen@utah.edu</a></td>
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<td>Varner, Johanna</td>
<td>University of Utah</td>
<td>PhD Candidate, Biology – Pika research</td>
<td><a href="mailto:johanna.varner@utah.edu">johanna.varner@utah.edu</a></td>
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<td>Whittekiend, David</td>
<td>USFS, Uinta Wasatch Cache</td>
<td>Forest Supervisor</td>
<td><a href="mailto:dwhittekiend@fs.fed.us">dwhittekiend@fs.fed.us</a></td>
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Afternoon Brainstorming Session – 1pm

- Maura Olivos and Jen Clancy introduce themselves, and discuss their Research and Environmental Education Database Project and the Alta Ecological Assessment Symposium Survey results.
- Pat Shea introduces himself and Friends of Alta, describes the challenges to conservation in Alta, introduces keynote speaker, Uintah-Wasatch-Cache National Forest (UWCNF) Supervisor Dave Whittekiend.

Keynote Speaker: Dave Whittekiend

- In UWCNF, sustainable recreation management is our biggest challenge.
- UWCNF plan is a zoning document: Alta is a watershed and recreation management zone. Developed vs undeveloped recreation. USFS is open to new recreational trends.
- Everything humans do on the forest has an impact: educating users of this reality is critical.
- Fee areas have been successful in providing funds for local projects: Millcreek, American Fork, etc.
- Inter-agency partnerships are vital, as are volunteers—more than 12,000 individuals volunteer on the UWCNF annually: this is a unique resource.
- UWCNF has unique accessibility, making our community of stakeholders large and diverse.
- USFS faces more restricted budgets, paired with an extremely high demand for services.

General Introductions – 1:40pm

Joan Degiorgio, Discussion Facilitator

- We are interested in science-based decision making.
- How do we create common ground, compile common data for such science-based decision making?
- Introductions: what do scientists want to know about Alta? What do land managers need to know in order to make policy?
- How do we go about gathering/maintaining database? How do we organize?

Marion Hubbard

- How do we define “Alta?”
- For this discussion it was established that the area would encompass Albion Basin, Collins Gulch, and the south facing slopes from roughly Hellgate to Grizzly Gulch. On the western boundary there would be a line down the Peruvian ridgeline to the top of Mt Superior.

Liam Fitzgerald

- Alta has withstood the
onslaught of detrimental development pressure; how long will that continue?

- **The biggest problem for our planning outlook is vehicle traffic.** User numbers will continue to explode, while transportation options have not changed meaningfully in fifty years. Individuals and agencies have not made sacrifices in order to develop new possibilities.

**Jack Longino**
- Ecologist, insects, "I like ants in particular." New to Utah.

**Erika Longino**
- Interested in conversations about sustainable recreation management.

**Nalini Nadkarni**
- Bring science to society.
- Interested in getting U of U students involved in science in Alta
- Ski areas could be very effective social environments in which to disseminate scientific consensus regarding watershed health, climate, etc.
- In Alta/Little Cottonwood Canyon/UWCNF, there is potential for eco-recreation, which is a great way for people to become personally invested in ecology and environmental policy.

**Skip Silloway**
- Desires more knowledge and facts, so that stakeholders in the Alta community can make more affirmative, progressive policy.

**Paul Moxley**
- Alta IS moving forward in terms of offering better recreation services/access.
- Concerned with Alta community’s economic situation: Alta is not a viable place to make a living at present.
- Ecological challenges are challenges to Alta community’s economic viability: dogs, bark beetles, etc…we have protective policies but we need to clarify the science behind them.

**Chris Crocket**
- Division of Wildlife Resources has partnered with CCF and Hogle Zoo to conduct research on boreal toads in Alta.

**Erica Von Allmen**
- Watershed restoration is extremely difficult; conservation is cheaper and more efficient than letting watershed health get out of control.
- Restricting vehicle access will be the best way to ensure watershed health in LCC.

**Patrick Nelson**
- SLC Public Utilities relies on the cleanest possible water, in order to use minimal purification measures.
- Worried that we will not keep up with population growth and increased use, despite our best intentions.

**Jo Varner**
- Has instituted Pika “citizen surveys,” has taken middle school groups to Cecret Lake, thinks citizen science needs an attractive focus, like Pikas. Can perform regionally accurate Pika imitations.
  - Maura and Jen ask Jo to share data from Alta science projects.
Allison Jones
- Looking for more reference areas for Aspen study: LCC/BCC is well-managed to provide natural characteristics. Aspen surveys are good for public engagement.

Amy Collins
- Tree Utah is already in partnerships with Alta Ski Area and Friends of Alta.

Chris Cawley
- Snow, weather, and avalanche data compiled by Alta, Snowbird, UDOT, USFS in LCC could be a valuable resource for scientific reference.

Mary Pendergast
- Alta scientific data should be transparent, accessible to the diverse community of stakeholders who’ll use it.

Roger Bourke
- Attractive places attract people until the places aren’t attractive anymore. Population is growing, open space is not. As a year round resident, agrees with the survey results indicating top three challenges for science-based decisions and policy in Alta are vehicle traffic, development, and climate change.

Carolina Roa
- Citizen Science builds awareness, strengthens personal connections to areas.

Jan Striefel
- Do boreal toads eat beetles? Wouldn’t that be convenient ;)

Tom Pollard:
- In Alta, balancing environmental and economic concerns is tough but necessary.

John Guldner:
- “Alta is to SLC what Central Park is to NYC”—Bill Levitt.
- Science has occurred in Alta, we just need to start talking about it.

Claire Woodman:
- The Wasatch Summit Program is our best opportunity for well-rounded planning solutions yet.
- Alta is stagnant economically, but it doesn’t have to be.

What are we looking for? - 2:30 PM

Joan Degiorgio:
- We have developed new partnerships today already.
- Alta will be a great place for the public to engage science and ecology.
- What do we need to know to make decisions?
- How do we balance nature and people in Alta?

Dave Whittekiend:
- Baseline species inventory
- What do we want Alta/LCC to look like? Stasis is impossible.
Pat Shea:
- Budget awareness is critical—in order to be independent and effective, this project needs its own budget and funding sources.
- Wasatch Front land use and environmental planning needs to take place beyond local jurisdictions, outside of and alongside governmental agencies.

Maura Olivos:
- Don’t forget the understory: ecology starts in the soil, and the understory is where the soil’s characteristics are most apparent. Alta contains tremendous understory and soil diversity.

Joan Degiorgio:
- What will be the format of our future scientific database?
- What are the key elements of Alta’s ecological scheme that most clearly indicate the health of Alta’s environment?

Allison Jones:
- Does the Wasatch Summit Project have a format for “desired future conditions” or other methods we could adopt? Does it have LCC specific assessments we could use as a baseline?

Tom Pollard:
- Wasatch Summit will use existing data; work so far has been to enhance collaboration of partners and sharing of existing information.

Pat Shea
- Skeptical of motivation for Wasatch Summit, thinks transportation solutions are being considered first and ecological health will be secondary (Claire Woodman did not agree).

Jan Striefel:
- This project—our process, our standards—should inform the Wasatch Summit Program, not the other way around.

Dave Whittekiend:
- The Wasatch Summit Program is still in the very early stages: we’re still studying the “effective environment.” then we’ll have to draft a plan, then there’ll be NEPA…

Skip Silloway & John Guldner:
- We don’t have time to wait for this project to evolve: we need information NOW here in the town of Alta.

Pat Shea:
- Forest Service data protocol could be used to manage content of Alta Ecological Assessment.

Dave Whittekiend:
- USFS data protocol might be too general at this point, we need baseline/goals first then we can apply organizing principles.

Nalini Nadkarni:
- Four possible elements of ecological assessment: What is happening with our physical environment (what are we already monitoring)? Biotic components? Functional health of the ecosystem—air/water quality, etc? Social interactions: humans with their surroundings? We should think about ecosystem health as wholly as we consider our own personal, human health.

Marion Hubbard:
- Who will manage this database?
- Division of Water Quality collects information in the watershed monthly, and there is an accessible database of that information.
Pat Shea:
- We should establish a server at the Town of Alta offices to maintain an Alta ecological database. This will require more money from the Town of Alta, Alta Ski Lifts, etc, and the value of the information it provides to those entities should be compelling.

Chris Crocket:
- We need to consider how to present the information to the public and get both the public and the political community engaged in the collection/valuation of information, from the outset of the project.

John Guldner
- Watershed data has been used in various lawsuits, with mixed results.

Jo Varner
- Identify gaps in current data: what are the indicator species for functional health? What is the functional diversity of the Alta ecosystem? Critical flora? Pollinators, seed dispersers?

Jack Logino:
- Science-based decision-making? More often, it’s decision-based science-making.
- Science of ecology is the science of climate: ecology is not protectable; we can only manage our impacts and observe those impacts in nature. This can never be a natural place, because of the density of human recreational activity in the winter.
- We should study the impact of human activity and material flow on ecology in Alta.

Maura Olivos:
- Obviously, Alta is not pristine, although we are doing a better job of allowing natural ecology to develop in the wake of deforestation, early development, etc.
- We want more information about what have presently, and then we’ll identify red-lines, cutoffs, and thresholds; it is critical to identify what we are willing to accept in terms of ecosystem degradation.

Jo Varner:
- Public engagement requires a clear and attractive subject: Pika studies have already provided the kind of information we seek here in Utah, the Great Basin, etc.

Nalini Nadkarni
- Choose functionalities, identify lenses of threat;
- Vehicles, private development, climate change.
- What species bear the effects of vehicular pollution and other threats?

Joan Degiorgio:
- TNC’s ACT framework for climate change monitoring and policy response should be considered.
- Do we want this assessment to be threat driven?

Amy Collins:
- Can we add a surcharge to already popular service fees—lift tickets, other services here in Alta--to fund this project?

Pat Shea:
- NSF, etc, lacks the funding they might have previously had. Create a Special Use District.
- Like Maura suggested, we’ll establish parameters above/below which ecological crisis is apparent.
Conclusions – 3:30 PM

Joan Degiorio:
- Nalini’s superstructure
- We need indicator species, thresholds
- Our next step is to determine objectives
- We need to establish our database, procedures
- What is unique and vulnerable in Alta?
- The Nature Conservancy’s Conservation Action Plan

Maura Olivos:
- Let’s start the science ASAP

Mary Pendergast:
- We need to evaluate possible study based on its likely applicability to policy

Dave Whittekiend:
- Identify threats: Vehicles, development, climate change?
- Gather Data by standard protocol, in order to develop a transparent, exportable dataset. Alta management plan can be unique, but the data should be more broadly applicable.
### 2014 Alta Ecological Assessment Symposium Survey Results

#### 1. I am a...please select all that apply

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<td>Environmental Scientist/Researcher</td>
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<td>Environmental Stewardship Coordinator</td>
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#### Comments
- Forest Service Siviculturalist
- Alta Land Use Authority
- Avalanche Forecaster in Little Cottonwood Canyon
- Park Naturalist
- Salt Lake City Dept of Public Utilities
- Town Official

#### 2. If applicable, what types of environmental research have you conducted at large (in Alta or in general)?

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#### Comments
- Transportation Studies
- Avalanche activity
- I teach in a State Park
- Bird Surveys
- Bark Beetle infestation
- Planetary science

#### 3. If you have conducted or managed environmental research in Alta please check all that apply.

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#### Comments
- Avalanche activity
- Water sampling and TMDL zinc remediation working group
- Informal Pika monitoring with K-12 groups
- I have done bird surveys in the area
- Worked with Alta’s Environmental Center
- Snow Science
4. What land uses do you think cause the greatest negative environmental impacts to Alta? Please select your top 3 concerns

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5. Thinking about only Alta, are you aware of gaps in the environmental studies work that has been done? Is there general information about a natural resource or a specific study you would like to see done and if so, how could the information be useful in land use planning decisions?

- Need an Integrated data set/source to better share data
- Not enough awareness about environmental studies that have taken place and, therefore, what’s needed
- Monitoring of vegetation plots that might serve as a baseline for assessing changes in plant community composition that result from climate change.
- More breeding and wintering bird surveys could help identify the unique species of the area.
- Baseline inventory of plants of wildlife

6. For land managers, what information do YOU need most for the decisions you are making today?

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7. Friends of Alta and the Alta Environmental Center are considering an Ecological Assessment of Alta. Would you be interested in participating or supporting this effort?

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Comments:
- I'd like to see the FS involved with this at some level.
- Depends on the priorities of my department.
- I have something specific in mind, bird oriented where we could support the most.
- There are others better suited to do this than me.