

UGS BOARD MEETING
Department of Natural Resources
Utah Geological Survey
1594 West North Temple, Suite 3110, Salt Lake City
Wednesday, May 1, 2019

The meeting of the UGS Board was called to order at 8:33 a.m.

ATTENDANCE

Board members: Marc Eckels – Chair, Dave Garbrecht, Rick Chesnut, Pete Kilbourne, Sam Quigley, and Tom Faddies

UGS Staff: Bill Keach, Mike Hylland, Jodi Patterson, Cheryl Gustin, Steve Bowman and Hugh Hurlow

Apologies: Elissa Richards and Ken Fleck

Introduction of New Employees

One new hire in the Groundwater/Wetlands Program. Peter Goodwin started in February as a Wetlands Mapper. Pete worked for the UGS as a seasonal botanist several years ago; prior to joining the UGS he worked as a consultant the past four years here in Salt Lake City. He aced our wetland mapping test during the interview and has a lot of good ideas to contribute to the program. Bill Keach presented his background and introduction as Peter was not in attendance.

The legislature approved funding of \$100,000 to be used to hire a new database manager. We anticipate filling this position after July 1, 2019.

Board Member Tenure

Elissa Richards, Ken Fleck, and Sam Quigley have completed required paper work for application to serve another term on the board. Governor approval pending and should be done in the August interim.

Marc Eckels requested drafting a list of term dates for each board member to be included in the next board meeting.

Bill Keach announced the new appointment of DNR director Brian Steed and requested a short summary bio from each board member to include in a transition report for Brian Steed. Bill also requested each board member to take the Workplace Harassment Prevention training which he

will follow up with an email containing the link to each board member in order to fulfill that request once it is sent to him.

APPROVAL OF MINUTES

Pete Kilbourne motioned to approve the minutes of the January 9, 2019, UGS Board meeting as written. Dave Garbrecht seconded the motion. The Board voted, and the motion carried.

ACTION ITEM

Although contract proposals for external funding are provisionally approved by the Board by email, they are required to be formally approved at the next Board meeting. The following proposals were approved by the Board between their January 9, 2018, meeting and the present meeting:

Improving production in Utah's emerging Northern Paradox Unconventional Oil Play; funding from the University of Utah/EGI; new funding to the UGS \$750,000, total project cost \$10,000,000; estimated start 7/1/2019, estimated end 6/30/2023.

Investigating enhanced oil recovery using custom alkane mixtures in the Powder Wash field, Moffat County, CO; funding from the University of Utah/EGI; new funding to the UGS \$400,000, total project cost \$10,000,000; estimated start 10/1/19, estimated end 3/31/2023.

Monitoring at the Courthouse Wash monitoring well, Grand County, Utah; funding from the National Park Service, new funding to UGS \$6,039, total project cost \$12,079; estimated start 3/1/19, estimated end 3/1/2020.

Monitoring Groundwater response to Pinyon & Juniper Treatments (Year 4); funding from the Utah Watershed Restoration Initiative; new funding to the UGS \$143,972, total project cost \$191,963; estimated start 7/1/2019, estimated end 6/30/2020.

Hydrologic monitoring of critical groundwater fed habitat – Year 10; funding from the Division of Wildlife, new funding to the UGS \$24,116, total project cost \$32,155; estimated start 7/1/2019, estimated end 6/30/2020.

Community science generated boreal toad surveys & aquatic habitat assessments; funding from the Hogle Zoo, new funding to the UGS \$6,212, total project cost \$8,283; estimated start 7/1/2019, estimated end 6/30/2020.

Develop rapid method & fill data gaps for native aquatic mollusks; funding from the Division of Wildlife, new funding to the UGS \$5,447, total project cost \$7,263; estimated start 7/1/2019, estimated end 6/30/2020.

Septic tank density study, Bryce Canyon Area; funding from the Division of Water Quality, new funding to the UGS \$20,311, total project cost \$40,623, estimated start 5/1/2019, estimated end 6/30/2020.

Project effectiveness monitoring water quality benefits of large-scale pinyon juniper treatments, Montezuma Creek, Utah; funding from the Division of Water Quality, new funding to the UGS \$19,935, total project cost \$26,580, estimated start 7/1/2019, estimated end 6/30/2020.

FY 2019 UGS Geologic Data Preservation Project; funding from the USGS, new funding to the UGS \$97,204, total project cost \$194,519, estimated start 7/1/2019, estimated end 6/30/2020.

Rick Chesnut motioned to approve the above proposals. Sam Quigley seconded. Board voted, and motion carried.

Director's Report:

Big Picture thoughts - Looking forward

Almost four months in the job. Have come to really appreciate the quality of the people and the work they do. First goal was to do a "listening tour". Wanted to meet all the employees, sit down with them individually and collectively. To learn about their work, projects and interests. Met individually with each of the program managers and hear from them about what their programs and employees do. One week into the job had the opportunity to meet with the legislature, present who we are and what we need.

Funding and Budget –

Stabilizing how we fund the UGS. Surviving on the volatility of the oil commodity market can be hard. The volatility of the petroleum revenue makes long term planning difficult. The good years can be great, and the down years are difficult. Routine maintenance gets deferred, people and positions are lost, keeping current with technology is difficult to implement and training is often cut. Pricing and revenue are beyond our control.

Revenues from production and mining on federal lands continue to decline. Forecasts do not expect this to change for at least ten years.

The type and abundance of research and work projects can vary from year, but we do have some control as to where, how and when we pursue opportunities.

Long term planning –

Developing a yearly budget should focus on long-term, at least five years out, so that we are proactive instead of reactive. The core lab is full. All agree we need additional space and equipment. Before building we need to understand what the demand for space and activity will be, not just in the next year or two, but 5-10 years out. Do we need more space to house core related to petroleum bearing rocks? Or do we need to pursue a more expansive inventory of 'critical minerals'?

Succession Planning –

Much of the Geologic Mapping Program will likely retire in the next ten years. Succession planning for this group is critical. Not just in terms of people, but also in terms of technology and methodology, which may be dictated by future needs for specialized needs and focus areas. Mapping is not the only program that will need to address these issues.

Understanding Hazards/Groundwater to Satisfy an Expanding Population –

Rapid growth on the Wasatch Front and in Washington County is putting extreme pressure on city and county planners to identify and permit safe building areas. This can't be done without a keen understanding of potential geologic hazards.

Groundwater will be an issue that will receive ever increasing focus and attention due to population growth. Past discussions have explored how to best fund. Historically most funding comes from soft money (research and non-state) sources. May need to consider sourcing from administrative funds in the future.

Marc Eckels suggested having a meeting with the Board, DNR Director, UGS Director and Program Managers to get a plan together for presentation to Legislation to petition more stabilization.

Core center storage options were discussed. Pete Kilbourne suggested finding abandoned building that could be rented for cheaper rates. Sam Quigley suggested getting in contact with WETC. Michelle Fleck would probably get information for contacts.

September Field Trip – Tentative Itinerary

West Desert – Structural Geology and Mineral Resources

September 13-14, 2019

FY20 Building Block Request

The UGS FY20 incremental budget (building block) request for \$120k (ongoing) to fund a Data Coordinator position was included in the Governor's budget recommendations. Our request was for 100% General Funds; however, GOMB changed the funding structure to \$60k General Funds and \$60k Dedicated Credits (i.e., restricted funds and fee collections). The Natural Resources, Agriculture, and Environmental Quality Appropriations Subcommittee recommended \$100k in ongoing General Funds, and this funding was approved with the passage of Senate Bill 2. We plan to advertise the position and conduct interviews later this spring and hope to have the new person working shortly after the funding becomes available on July 1, 2019.

Financial Update – Jodi Patterson

FY19 Financial Update:

- Financials are through the March 2019 accounting period. The Utah Geological Survey is currently forecasting a 2019 fiscal year surplus of approximately \$509k. We started the 2019 fiscal year with a carry forward from last fiscal year (2018) of \$521,584.
- March represents 75% of the fiscal year. Total percentage of outside revenue billed is at about 69%. This is in line with expenditures to date at about 67% (which also accounts for the payroll lag of about 6% - payroll posted YTD is 69.23%).
- We have recently increased our estimate of Mineral Lease revenue slightly to \$1.45 mil for the fiscal year.

Legislative Update (Jodi Patterson – Mike Hylland)

FY20 UGS Appropriated Budget:

Base Budget	\$7,780,300
Increase in Dedicated Credits/Contract Revenue	\$314,700
Data Coordinator	\$100,000
Internal Service Fund Impacts (Risk Mgt, DTS, Fleet)	\$1,300
Compensation	<u>\$210,500</u>
	<u>\$8,406,800</u>

Notes regarding FY20 Budget:

- Includes an estimated \$600,000 beginning balance from FY19; \$701,000 federal funds; \$903,500 dedicated credits; \$1,611,300 mineral lease.
- FY19 non-lapse is currently estimated at \$509K (\$91,000) below appropriation; this is ok for FY19 because we only have authority for up to \$600,000 so we want to come close but not go over; but it puts us starting under what’s appropriated.
- FY19 outside funding (federal and dedicated credits) currently estimated around \$1.7 compared to FY20 appropriated budget is \$1.6. It would be nice to see this back up around \$2 mil.
- Mike Vanden Berg currently estimates FY20 Mineral Lease at \$1.3 million (\$311,300 below appropriation).
- This all seems to balance out ok, except it does not account for any FY20 non-lapsing balance for FY21 (\$600,000 ideal); equipment maintenance or replacements beyond what might be within normal program budgets (\$150,000 ideal); salary/staff adjustments (\$50,000?); 3 year Adobe renewal (\$50,000); or other unplanned items (\$50,000). ~ \$900,000.

Early August we should have the FY20 Operating Budget estimated and have a closer picture of any budget concerns we will want to address in the next legislative session.

Bill Keach requested that at the August meeting the Board draft a directive to include with budget requests from the legislature.

2019 General Session Bills of Interest to UGS

Jodi P

SB 220 – Budgeting Revisions (Sen. Ipson)

- Modifies budgeting provisions and definitions relating to dedicated credits, expendable receipts, and grants. Provides that dedicated credits are subject to appropriations and certain restrictions. Provides expendable receipts are not limited by appropriations and provides procedures and reporting requirements if the agency receive greater than the amount appropriated.

HJR18 – Joint Rules Resolutions on Base Budgeting Provisions (Rep. Moss)

- Requires appropriations subcommittees to conduct zero based budget analysis for ~20% of its budgets each interim (each budget at least every 5 years)

HB8 – State Agency and Higher Education Compensation Appropriations (Rep. Moss)

- Provided a 2.5% salary increase, an average 4.35% health insurance increase, 0.12 % decrease workers' compensation rate, 0.02% increase unemployment rate, up-to \$26 per pay period match retirement, and other compensation adjustments as authorized. [\$127,300 (60%) General Fund and \$83,200 (40%) Other funds].

SB2 – New and Current Fiscal Year Supplemental Appropriations Act (Sen. Stevenson)

- Supplements or reduces appropriations; for UGS includes:
 - \$5 million General Fund, one-time, non-lapsing (FY19) for Bonneville Salt Flats Restoration Project (contingent on \$45 million non-State funds)
 - \$481,400 Dedicated Credits, Increase in Contract Revenue (FY19)
 - Non-lapse Intent Language up to \$600,000 (FY19)
 - \$100k General Fund, ongoing (FY20) for new data coordinator position
 - \$314,700 Dedicated Credits, Increase in Contract Revenue (FY20)

SB5 – Base Budget Bill (Sen. Hinkins)

- Base budget bill that appropriates funds for FY20. UGS \$7,780,300 Total

Mike H

HB14 – State Monuments Act Amendments (Rep. Eliason)

- Creates State Monuments Act, provides for State Parks or other organization to manage state monuments

HB90 – Occupational Licensing Modifications (Rep. Hutchings)

- Provides allowance for criminal record to not disqualify a license applicant if all other licensing requirements are met

HB226 – Occupational Licensing Revisions (Rep. Thurston)

- Allows DOPL director to implement competency-based licensing requirement as an alternative to time-based requirement

HB387 – Boards and Commissions Amendments (Rep. Knotwell)

- Requires executive branch board to submit an annual report to Governor’s Office (see 67-1-2.5(5))
- Repeals Subsection 53C-3-203(4)(b)(vii), distribution of LEDA money to UGS for West Desert monitoring (July 1, 2020)
- Adds sunset date for Utah Seismic Safety Commission (January 1, 2025)

SB24 – State Energy Policy Amendments (Sen. Grover)

- Promotes new nuclear power generation technologies (molten salt reactors), energy development in certain areas, and K-12 energy education programs

HCR2 – Concurrent Resolution Supporting Renewable and Sustainable Energy Options to Promote Rural Economic Development (Rep. Arent)

- Supports development of wind, solar, hydrogen, hydroelectric, and geothermal energy in rural areas, and export of those energy sources to other states

SCR8 – Concurrent Resolution Supporting Exports of Utah Natural Gas to International Markets (Sen. Winterton)

- Supports export of liquefied natural gas (LNG) as an opportunity to realize economic development in rural communities and tribal nations

Presentations:

Stefan Kirby was out sick so he did not present on FORGE project. Hugh stepped in and presented on Groundwater and Wetland program's upcoming grant funded projects.

Steve Bowman presented on Geologic Hazards Program Updates.

Crawford Award - Board Member Considerations

Two nominations this year:

UGS Special Study 158 – WATER SALINITY STUDY FOR THE SOUTHERN SAN PITCH DRAINAGE SYSTEM IN SANPETE COUNTY, UTAH by Janae Wallace, J. Lucy Jordan, Christian Hardwick, and Hugh Hurlow

https://ugspub.nr.utah.gov/publications/special_studies/ss-158.pdf

UGS Bulletin 138—Produced Water in the Uinta Basin, Utah: Evaluation of Reservoirs, Water Storage Aquifers, and Management Options, Thomas C. Chidsey, Jr., Compiler and Editor <https://ugspub.nr.utah.gov/publications/bulletins/b-138.pdf>

Criteria Reminder and Comments

Board members are encouraged to adhere closely to the award criteria when making their selection. For your reference, as noted in the UGS Arthur L. Crawford Award criteria for selection, the award is intended to recognize “outstanding achievement, accomplishments, or contributions by a current UGS scientist to the understanding of some aspect of Utah geology or

earth science.” The criteria also indicate that the work “greatly enhances the understanding of Utah geology/earth science,” and “has had a major influence on the understanding of geology or earth science of Utah.” When considering the nominations for the award, UGS Board members should keep in mind the award’s emphasis on recognizing (1) an individual or team, and (2) the influence of the individual’s or team’s work on the understanding of Utah geology or earth science.

In recent years, some UGS staff have expressed frustration over past selections. Some no longer take the award seriously and have become disinclined to even make a nomination. Their perception is that in the past, some UGS Boards seem to have made their award selection based on certain aspects of the publication that resulted from the work, rather than the significance of original scientific effort on the part of the author(s).

Board feels criteria was met with all previous awards.

Peter Kilbourne raised the question if the criteria should be changed in any way.

Mark Eckels feels it is fine the way it is written and no objection from the other board members.

Pete Kilbourne motioned that public meeting was to adjourn as Crawford Award vote was the final agenda item and would be a closed session. Sam Quigley seconded the motion to adjourn public meeting.

Marc Eckels adjourned at 12:00 pm.

Next Meeting: Wednesday, August 21, 2019.