DCNR – Natural Gas Advisory Committee

February 28, 2019

Department Update
John Norbeck

- Budget was announced early February.
- Basically, a cost to carry budget, with additional $1 million for filling 12 additional positions. Over past several years, compliment has been reduced by about 10%. Parks will also be able to fill an additional 20 positions above those 12.
- Budget includes General Fund money, O&G money, Keystone money, and some other special funds. Over past several years, we were shifting away from O&G money, but this year, we’re depending on special funds a bit more to fund operations. We’ll be using O&G and Keystone funds more. (Keystone funds are from realty transfer tax.) We’ll also be using Environmental Stewardship Funds some more. (ESF funds are from tipping fees at landfills.)
- Going to do more projecting of funding for multi-year projects, rather than holding full funding amount for entire project over the course of several years.
- Restore PA = $4.5 billion bond issue for infrastructure projects. Based on getting a severance tax to pay off the bond over time. DCNR has $1 billion backlog of infrastructure projects. Possible projects = ATV trails, biking trails, high hazard dams, stream restoration, grants to municipalities for stormwater management, urban tree work, urban blight to greenspace projects, high-speed internet throughout Commonwealth, disaster relief fund for projects not covered by FEMA. For industry, some funding might be used for downstream use of gas resources (secondary uses).
- NGAC Comment – Some climate change planners, urban coastal/river-front communities, are looking to relocate population to rural areas, including state forests throughout the country. We might want to start doing some planning regarding this type of development change.
- NGAC Comments – Will there be opportunities for matching funds from industry for the infrastructure projects under Restore PA? PennDOT has such a program that has been very successful for road improvement projects.
  - Not sure at this point, as we only have skeleton of plan at this point. But DNCR does use matching grant programs already.

Ellen Shultzabarger

- Did state-wide SFRMP in 2016. Over the past year, we’ve been working on district plans that support the SFRMP. We did public meetings from the summer through fall. Provided draft plans to public and accepted comments. We are now evaluating comments, and hope to have plans finished in May-June 2019.
- We have two planning processes that are Commonwealth-wide (not just SFL).
  - Strategic Plan – Penn’s Woods.
  - Both require a lot of feedback and public input.
We’ll be starting process after District Plans are done to garner public input on these two plans. Have some outside help getting public input – online PSU Lion Poll for input from representative group of Pennsylvanians and focus groups. We’ll be working with Advisory Committees as part of this process.

- Certification: We are FSC certified and have been for many years. This year we are adding SFI certification. We went through our first audit for dual FSC/SFI. Although not yet technically SFI certified, still some contracting work to do, but we are very close. Adding another certification safeguards us from possibility of one ever ceasing to exist. Also, SFI certification is raising in popularity with U.S, while FSC is more recognized internationally.
- Plant Regulations for threatened and endangered species. We updated them at end of 2018. We made 50 changes. Most of them were delisting’s, although some were new listings or changes in status. We have a number still in proposed status that we’ll be working on changing in coming years.
- Climate Change Adaptation Report. Put out summer 2018 (available online). Certain goals for each Bureau in DCNR. Includes a lot of goals related to infrastructure and flooding. BOF goals also relate to change in species composition.
- Spotted Lantern Fly. Working with Dept of Ag and USFS and Penn State on managing SLF. Still a lot of questions and unknowns. Looking at ways to target treatment around Ailanthus trees.
- Stream Buffers. Major effort, department-wide, is to add stream buffers, particularly within Chesapeake Bay watershed. We work on Forest subcommittee of Watershed Implementation Plan. We are looking to add 85,000 acres. One element of our program is multi-functional buffers. Also trying to do a lot of turf-to-trees and turf-to-meadows. We may need $47 million a year to accomplish these goals. The January federal Farm Bill has new element of income-producing buffers, which came out of PA, as part of CREP. We are eager to see how that develops.
- NGAC Questions – Is most of buffer targeting private property?
  - Yes. Largely focused on ag, but also urban areas.
- NGAC Comment – Ireland gets $1 billion in direct payments to landowners for nutrient management (its 2/3 the size of PA). PA gets about $120 million. There is a big disparity in what PA landowners (US landowners) are getting compared to internationally. Funded by “CAP” payment from European Union, started following WWII.
- DCNR Oil & Gas Program Status Update (statistics)
  - Handout provided
  - NGAC – Does billion include conventional?
    - Yes. But, it’s only a couple million dollars. The data is deposits to O&G Lease Fund for all reasons.
  - NGAC – How many rigs are on us? (BOF lands)
    - We think 4. Rigs are 5 times more efficient than they were back in 2008, so they can drill a lot more wells with one rig than they used to be able to do.
  - NGAC – Are they drilling on existing pads or building new pads?
    - Both, but a lot are filling in on existing pads.
  - NGAC – Are we getting any plugging yet?
    - Only a couple Marcellus wells plugged, but both due to mechanical deficiencies.
- We are seeing some pads being abandoned because lateral length increased significantly since some pads were built, but not drilled, back during the boom.
- We see around 20 conventional wells plugged a year because wells need to meet 1MCF/day.
  - NGAC – Is the converted # just the pads footprint?
    - No. It includes access roads, pipelines, compressor stations.
  - NGAC – Any idea the breakdown of conversion between pads and pipelines (that get restored)?
    - Not sure, but it is probably in the Monitoring Report.

**ROW Mitigation Models**

Sara Nicholas - Opening

- We are presenting this at a point in our evaluation process when we are very open to input.
- We are seeing a steady increase in pipeline projects.
- Parks is being challenged by potential impacts on their lands, which is much less common than ROWs on Forestry lands.
- It makes sense for the Department to have a uniform approach. We are examining internally what processes we might use.
- Eventually this is something we will share in PA Bulletin to get public comment.

**Comments and Questions from NGAC Members**

- NGAC - Is HEA built for ROW?
  - Originally built for superfund contaminated sites.
- NGAC - Pipelines are permanent, so how would this work?
  - This includes areas disturbed during pipeline construction, both temporary and permanent impacts.
- NGAC - There needs to be a blend of real estate value and ecological value.
- NGAC - Is this for financial payments or in-kind habitat construction on other sites?
  - Not sure at this point, could be either. Companies could potentially make a payment or perform new habitat construction.
- NGAC - Will this be in addition to stumpage value or in place of?
  - Likely in place of, but we are still evaluating this decision.
- NGAC - Oregon leases state owned ROW’s for cannabis production.
- NGAC - How do you assign values to HEA model?
  - Can use various habitat quality metrics.
- NGAC - How/who is making decisions on values per acre of habitat? Is it DCNR or a private firm?
  - Could be either. Part of HEA is estimating the per-acre restoration costs.
  - ITREE estimates ecological service values.
• NGAC - Must include markets values and adjust for market fluctuations.
• NGAC - Need to include human use impact values (Recreation)
• NGAC - Need to account for gained values due to ROW’s. Not all species and users are losers due to ROWs.
  o Includes increased recreation opportunities – snowmobile, atv, etc.
  o Rattlesnake habitat, etc.
• NGAC - Have numbers derived from HEA and ITREE been compared?
  o Not to date.
• NGAC - What are the goals for changing the way things are done now?
  o We (DCNR) are entrusted with managing the commonwealths state forest. As natural resource managers, it makes sense the reimbursement is for ecological and recreation values, which are part of our mission. It also seems a good practice in light of Article 1, Section 27 that we be good trustees of these resources and make sure we are fairly compensated.
• NGAC - What is being used now?
  o Real estate values, stumpage, and road use fees
• NGAC - This is a more creative and comprehensive way to look at this.
• NGAC - Is this much different? (Value)
  o We don’t know yet until we apply it to real situations/projects.
• NGAC - Maybe better to make this in habitat establishment than payment.
• NGAC - This is already part of the process that industry is already doing at a district level.
• NGAC - This would not be applied on oil and gas lease tracts. It is intended for ROW projects outside of lease rights, such as FERC transmission projects.
• NGAC - Where does the ROW money go?
  o DCNR acquisition fund
• NGAC - According to Monitoring Report, we have converted 1759 acres to gas infrastructure. Have acquired 1759 new acres?
  o Yes, far more.
• NGAC - PGC break down for ROW payment are different. Getting fees every year.
• NGAC - West Virginia has converted coal lands into ag lands. WV also looking at green houses for food production along pipelines.
• NGAC - How many license agreements a year.
  o Around 30
• NGAC - How does this happen on private land?
  o Everyone is different
• NGAC - Acceptability of this method might depend on how much higher it (fee) will be then it is now. If its close it might be a good thing.
• NGAC - We can’t add all values up together, it will be too high.
• NGAC - What happens if species come in after the disturbance? How is it compensated for?
  o Unknown.
• NGAC - Top values are recreation and ecological.
**Addressing Legacy Wells in PA**

Teddy Borawski – **Presentation**

**Discussion**

- DEP looking for partnerships with industry to plug wells. Several companies in the past have stepped forward to plug wells that were problematic.
- Future presentations could be from DEP on state-wide program, from NETL on remote sensing techniques for finding wells and emissions, and from industry on their experience on well plugging.
- DEP stated that very appreciative of the funding DCNR is providing for this effort.
- The 400 wells that are on official list on DCNR lands are a subset of the 8,000 on the DEP list. DCNR expects that are many more legacy wells on DCNR lands. The NETL tools may help us find more. Foresters in the field help find them as well.
- The 22 Project Areas on DCNR land are prioritized. DCNR hopes to share a position paper with the Project Area prioritization in the future. This could be helpful to industry for looking for partnership opportunities.
- For budgeting purposes, we have to overbudget due to uncertainty in costs.
- Costs for plugging have increased mainly due to number and availability of operators willing to plug wells. Many well plugging companies started working in Marcellus industry, and so they are less eager to bid on well plugging jobs. Also, the work is risky, which is a deterrent.
- Hopefully our partnership program can serve as an example for how this could be tackled throughout the state.

**Committee Member Updates**

- Tamara Gagnolet (TNC) – meeting idea – ROWs management and construction BMPs.
- Bruce Snyder (Fire Cherry Consulting) – meeting idea – stormwater management alternatives (e.g., clearing forest for stormwater basins)
  - Friction between DEP-DCNR about using stormwater practices that aren’t recognized controls. Need to demonstrate that alternatives are effective. But there is an opportunity to make some alternative practices more likely to be proposed by industry. Addressing these issues during the permit review process is not ideal.
  - Need additional data on what works, as opposed to relying on professional opinion.
  - Seems to be merit to DCNR exploring some research and design plans to support alternatives.
- Merlin Benner (Wildlife Specialists) – interested to hear more about legacy wells, and particularly methane detection
- Bob Hendricks (Shell) – Shell taking a pause for next couple years with gas prices where they are.
- Lance Ridall (Repsol)– Repsol increasing operations. Running two rigs. Aim to increase production by 50% by 2020.
• Patrick Drohan (PSU) – Two more papers on reclamation coming out this summer.
  o Would be interested to know more about pad reclamation projects. Some data gathering around those projects would be good. Some cost estimate input from industry would be helpful.
• Michael DeMatteo (PGC) – also interested in stormwater discussion
  o Could provide some data on PGC operations update too, similar to our statistics
  o Teddy noted that a couple times a year PGC and DNCR minerals experts get together to compare notes. They are the two largest landowners in PA.
• Jim Weaver (PA Wilds) - appreciated both presentations today. Happy to see progress on legacy wells.
  o Concerned about removing organic material from state forest land – feels it’s a strategic error to pull this stuff out of ecosystem. Would like to hear more information about this issue.
• Jack Clark (PA Off-Highway Vehicle Association) – looking at motorized recreational opportunities on ROW projects
• Ben Williams (Seneca Resources) – Seneca focused on return trips to pads. Operating 3 rigs. Completed a 3rd trip to a pad on Loyalsock.
  o Share similar perspectives on stormwater controls. Look at some in lieu programs to set aside forest land for controls.
  o Regarding organic material. Some forest districts want it to remain onsite. Some districts want it taken out. Seneca is of the view that is should remain in system.
• Kimberly Gridley (Tioga County Planning) – Thankful for welcome first meeting.
• Stephen Barondeau (Alta) – Atla has one rig.
  o Stephen happy to give presentation on stormwater at a future meeting
• Jordan Allison (PA F&BC – Interest to develop guidance on planting riparian buffer zones across perennial streams. Would be interested in cooperating partners. What could be acceptable to help provide stabilization, but not compromise safety of lines.
  o Taking on new initiative to take on assessments of rattlesnake habitat projects (flat rocks). Want to evaluate efficacy of those types of projects.