

Dawson Wetlands Workshop – October 27 2021

Dawson Region Wetlands Workshop

October 27, 2021 at TH Hall

On October 27, the Commission held a workshop at the TH Hall in Dawson as part of the public engagement on the **Draft Plan** for the Dawson Region. The format of the session included several facilitated discussions.

There were about 30 people in attendance, representing a wide range of perspectives. Among the attendees were commission members and staff, who participated in the discussions too.

Advice to the Commission

The attendees were asked to provide wetlands advice to the Commission.

- Hope that we can figure out a way to provide clarity on the issue of development and wetlands. No one knows what to expect and things are taking too long.
- There needs to be mapping of where wetlands are. Where, when, if and a different how [resources could be extracted].
- We're not starting from scratch - lots of work done in other places and can learn lessons on what not to do.
- Importance of sustainability of placer miners industry, working within wetlands and ensuring industry is fit for purpose and available for future generations.
- First-hand witness of salmon decline, and the fragility of species and ecosystems.
- Lots of different sectors and people are coming to understand each others' jobs better.
- Focus on coming up with something that the Recommended Plan can use and is more specific than Draft Plan.
- We have a bunch of different conversations of wetlands happening through different levels of policy, and there is a desire to understand these, and figure out how the land use plan fits into this. The land use plan is leading the conversation on wetlands.

Themes

Attendees were asked to identify their questions about wetlands. These were sorted in to some key themes.

Reclamation

- Is a wetland a non-renewable resource? Can it be reclaimed?
- How can mining in wetlands be sustainably achieved?

- Reclamation in / around wetlands: Where acceptable? Methods acceptable? Timelines? Who administers?
- What should be the goal of reclamation? E.g. Biodiversity? Restoring original function? Moose habitat? Water quality? Waterfowl habitat?
- How can placer mining be done without destroying the existing wetland?
- What does effective reclamation of wetlands look like?
- How can we restore the original value and functions of wetlands after mining?

Thresholds

- Is a 'trade-off' approach the right approach?
- How can we establish thresholds for wetlands avoidance?
- Is a threshold approach to Fen development the way to go?

The Future

- How do we plan for Change?
 - Wetlands naturally move and change over longer time-scales
 - Need to plan for diversity
- What will the Dawson Region's wetlands look like in the future (20-50 years from now) compared to today?
- What is our vision for the Wetlands of the Dawson Region? And how to get there?
- Job posting 2055: what will my children be doing for a living?
- How do we come to consensus on sustainable development so my children and children's children are able to live here, enjoy the land and also make a living?
- How does this fit with overall legislation updates?

Protection

- We all know the importance of sustaining wetlands. How do we determine what area is important for protection?
- Can small and rare wetland classes be conserved without protecting most or all of the broader Wetland complex?
- How does protection of wetlands and protection of salmon habitat (spawning, rearing and overwintering) intersect?
- Wetland systems are connected through groundwater flows. How do we consider and protect those connections, not just consider surface disturbance?
- How can we protect wetlands and their environmental functions by allowing development using our 'postage stamp' regulatory process? i.e. water license by water license.
- Which wetlands complexes of Special Importance can be nominated for protection?

Where are they?

- How do we make sure we know where wetlands are and ensure the data is available to all? And what type are they?
- How reliable is wetland mapping?
- How much does wetland mapping cost? Is it worth it?
- Why is mapping separate classes important?
- How do wetlands fit into the broader landscape and what role do they play?
- What's a practical way to advance a project with lack of mapping?

Balance

- How will we reconcile intrinsic cultural value with 'economic benefit'?
- How can industry and wetlands exist together?
- How can we / the plan maintain wetland functions (e.g. water quality, habitat, quantity, carbon storage) in the face of more climate change and mining?
- What about the other objectives of Chapter 11 outside of 'sustainable development'?
- How to establish a way of determining the importance of some wetlands, both economic and cultural and find a way to come up with a compromise?
- What are the common perspectives?
- What is the amount of overlap of different types of wetlands and economic mineral deposits? Also percentage of overlap?
- Idea of 'reciprocity' with wetland: give and take?

Commission Member Perspectives

- **Debbie:** Can sustainable development change and work within a diverse wetlands perspective? If so, what would be the first step?
- **Dan:** Commission is tasked with making recommendations that will work for future greater good. But when it comes to wetlands, I don't know much. I need help to find out how we can still have industry and still have our wetlands, and what are the trade offs. They're hard decisions that will affect people, businesses and livelihoods. I want this to work for the community, and find solutions together.
- **Alice:** I liked how the themes from previous emerged, but for me, there's two uses seemingly at odds and trying to find out where the compromise is, my questions. Reclamation for many of the functions of wetlands is a big key, don't know what that looks like but interested in learning more about what that could look like.
- **Jesse:** I keep coming back to reclamation. Would like a better understanding of whether wetlands be reclaimed? i.e. functionality of the wetland. Seeking a better scientific understanding, and better first hand account of what has been observed on the land. When you reclaim a wetland, does its functionality return? Thought they

were non-renewable resource. What are we seeing in other jurisdictions, what do scientists say about reclamation? Return of functionality is key.

- **Jesse:** Why is it so important to split these wetlands into distinct types? It seems to me that they are very similar in appearance and functionality, and that possibly trying to define them along hard lines is not all that useful and maybe more trouble than it is worth.

YG Draft Wetlands Policy

Government of Yukon is currently developing a territory-wide wetlands policy. The policy is in draft form and is undergoing a public review. YG delivered a presentation, after which a workshop discussion was held. These notes reflect the discussion:

General

- This is a policy that would apply to the whole territory, it leaves the specifics to the local level, acknowledging local knowledge is important.
- YG wants to create system that folks can work within during other conversations. Development is going to happen in the Yukon, protection may happen, but trying to sustain benefits of wetlands and balance the different perspectives and find common grounds that allows industry and protection to work together to sustain wetland benefits.
- The Wetlands Policy should be considered the floor or minimum – a land use plan can go above and beyond. It's the starting place for YG in discussions, it's the minimum bar they want to meet.

Buffers

- Question: In Draft Plan, wetlands aren't buffered, does the policy make that recommendation?
 - In Policy, no discussion about buffers in any context, done for a few reasons. One was to reflect that a defined buffer size is a simple system that may not be biologically or ecologically accurate.
 - Wetlands of Special Importance should be mapped to include a buffer.

Wetlands of Special Importance

Based upon the idea of wetlands of special importance in the Draft Wetland Policy, there was a discussion of how this linked to the regional land use plan.

Wetland Policy Scope

- The YG Draft Wetland Policy does not say where wetlands of special importance are; leaves this to local decision making, to a land use plan or RRC. Offers some guidance as to how it will be designated
- When you designate an area of Special Importance, does that become permanent? Or can you remove it?
 - Policy isn't legislation. So, when it comes to special importance, not a legislated protected area. It is a tool that is different from an SMA or HPA.
 - Doesn't create permanent designation. No withdrawal or no-go area. Instead it notes that there is an important wetland in an area and thus we need to consider our impacts on this and specifically, strive for target set that is no loss of wetland benefits.

Recommendations to Commission:

The workshop participants were asked 2 questions:

➤ **Were the Wetlands of Special Importance identified in the Draft Plan appropriate?**

- Flat Creek wetlands was missed and needs to be considered in the Recommended Plan. Need to reconsider boundaries.
- Could protection expand beyond LMU 19 (Upper Indian Wetlands?) [Buffered?]
- Consider White River & Ladue wetlands.
- North Ladue: LMU 21 White mentions these wetlands. Are these relevant?
- LMU 1 North
 - Has wetland complexes and that have been overlooked.
 - Wetlands should be identified in larger areas, so 'not lost' if Recommended Plan is shifted (e.g. SMA to ISA)
- LMU 19 Upper Indian Wetlands
 - compensation could be due if development is no longer viable
 - has a challenge of different values
- LMU 22 Scottie Creek
 - Bump from an SMA 2 to an ISA 1
 - Consider future impact on businesses in the area

➤ **What else does the Commission need to consider?**

- Future of Placer industry: restrictions vs. viability vs. future areas
- Best-in-class reclamation: industry wants clarity of what is needed, and where.
- Classification of creeks in the '90s – can we learn from this process and apply to wetlands?
- Mapping is very granular: need to ensure it syncs with on-the-ground knowledge.

- Plan is both Governments → Special Importance (SMA) triggers Chapter 10 → need to clarify overlap with Policy
- Should broaden the definition of wetlands (reduce the number of classes)

Interim Indian Wetlands Approach from YG

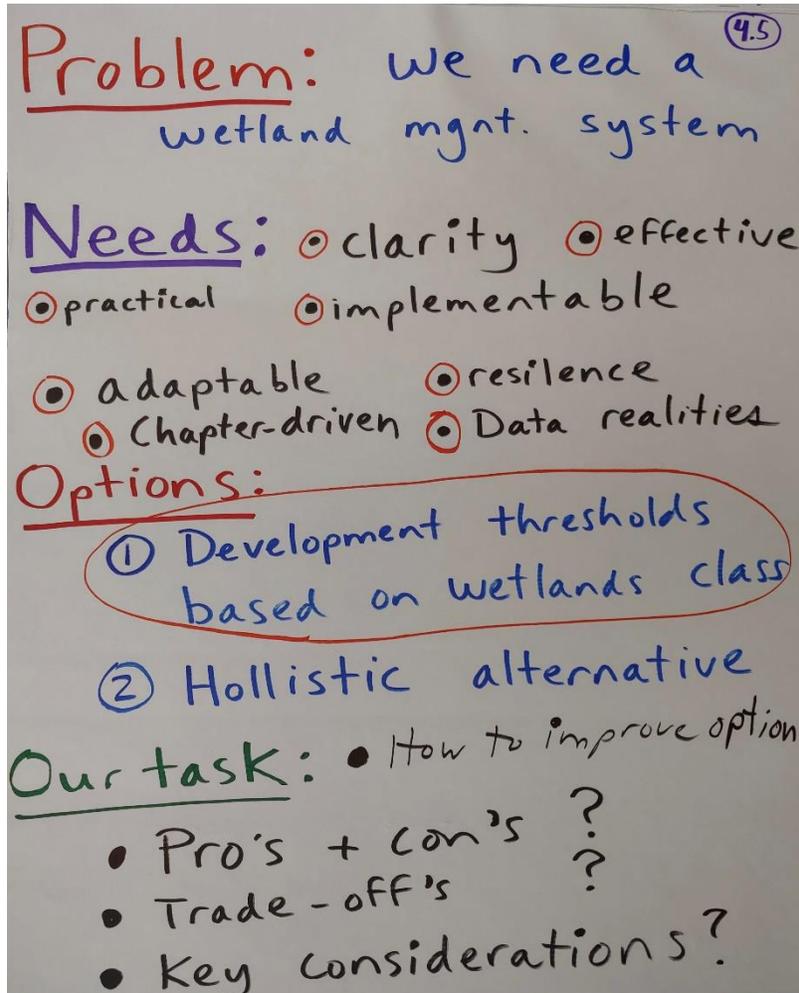
The Commission utilized the Interim Indian Wetlands Approach in development of some of the recommendations in the Draft Plan, such as considering development limits for fens. The workshop attendees were asked for their perspective on this approach.

Concerns with the approach

- Not clear what this approach is trying to achieve and the rationale. Even if provided, they haven't provided any evidence that this approach would achieve it. Black box.
- This is really something YG put out as a stopgap. Nobody understands it, nobody is really happy with it. Can talk about thresholds, doesn't work now, probably won't work tomorrow.
- Restrictions mean miners in the area had to agree not to mine in wetlands in order to get application going through Water Board. A lot of people have stopped working because it is so hard to get a permit and they don't want to take money.
- Wetlands reclamation plan is a requirement of application, but the content is unknown – this leads to confusion and lack of clarity.
- YESAB application implications are unclear and process is unilateral.
- TH didn't have a say, rationale wasn't clear. Frustrating. Found it arbitrary and hard to work with.
- No definition of a buffer. Permits and licensing are focussed on claim blocks (not the wetland area) when deliberating a license, difficult to understand how to protect that bog. If you're allowed to mine here, here and here, hard to understand how to protect when they all link [hydrology].
- No personal claims, or through water license. Been trying to make a wetlands reclamation plan, but in current situation, not been able to mine. Granted water license for 70 claims and haven't been able to develop a workable reclamation plan. For operator, super restrictive and haven't touched any new areas.
- What makes it unworkable?
 - It's who has jurisdiction to make final call. Where and how is it decided it will meet everyone's expectations. No one wants to take accountability to say yes / no and approve. Everyone there is working on previously opened cuts and running out quickly. Going forward, it's unworkable for the operator.

Wetland Management System

The concept of a management system for wetlands within the regional plan was raised during the workshop. This idea was explored in break-out sessions.



Development Limits/Thresholds

The Draft Plan proposed development limits (thresholds) as part of wetlands management. The attendees were asked for their perspective on these limits.

- Need to establish an ecological goal for wetlands. What are we striving to achieve?
- Commission does have management objectives for each LMU. What about overall? Need vision first, then numbers second.
- Do we look at whole or individual wetland?
- On the ground challenge of small wetlands: practicality
- Threshold information needs to be clear and open to all
- If thresholds approach to wetlands, what would that look like?

- Proponents apply for maximums to give buffer of development
- Improvement? Reporting of what happened on the ground vs. application
- Challenge of multiple proponents in one area. Proponent A might max threshold before Proponent B, putting them out of business → need long-range planning
- Needs GPS-based mapping [of where wetlands are]
- Idea of 'credit' system – learn from archaeological find scenario
- Thresholds approach has to be figured out first, then the numbers come second
 - Understand the rationale better
 - Buffer clarification
 - Threshold range feels arbitrary: can we base it on something?
 - What are the thresholds trying to achieve? (values should guide) e.g. maintain harvesting of grouse, berries, duck, etc.
- Thresholds: hard to pin down in a complex system
 - Each wetland is unique therefore should be evaluated on its own merit
- Fortymile caribou population rebounded in the absence of any real plan (and industry activity)
- Wetland interconnection is more of a 'well' versus a 'line'; up- and downstream
- Wetland buffers within thresholds:
 - Should be clear if used
 - An interim buffer could be used until better science
- Reclamation's role is key
 - Don't forget the cumulative effects framework tool:
 - need to define when it is considered "undisturbed" or "recovered"
 - consider defining it as when the terms of the license/permit are met – or when management objectives are achieved (hydrological connectivity)
 - Having recovered land no longer count as disturbed would be incentive for effective restoration
 - Maybe recovered land would count only for a fraction of full disturbance (or never disturbed). This would incentivize re-disturbing restored land over disturbing undisturbed land.
- Connection of restrictions based on scale: impact on big vs. small operator
 - Idea: two-tiered approach to alleviate stress on small operators. Feasibility of this is a key consideration.
- Why is there a rush to mine? Speed & scale
 - Industry has fear of future viability
 - Economies of scale – some operations very lean
 - Bigger operations may have bigger budgets which can lead to better reclamation → connection to thresholds & scale

- Thresholds don't close doors, but could allow the industry to last longer.
- Fear of losing viability due to economies of scale, especially with shallow (vs deep) deposits (need to be leaner)
- Do we put in place rules that extend the longevity of a finite resource?
 - But then what if 'it' is removed from the table forever?
- Can we restore as we go? Clarity on reclamation
- Mechanism cannot pit miners vs miners (related to thresholds)
- Adaptable thresholds as we learn (adaptive management)
- If thresholds, need to be public and transparent and therefore this falls to YG
- Arbitrary thresholds: something better than nothing to improve situation? Progress → perfection

Reclamation

Throughout the public engagement period, the Commission has received a lot of interest in wetlands reclamation, especially related to placer mining activity. Therefore, the Commission asked some questions to seek clarity regarding what the Recommended Plan should say about wetlands reclamation.

How should reclamation be undertaken?

- It depends on what we're reclaiming it for. What's the value? E.g. the swim hole isn't an example of restoring wetlands but he's reclaimed to a really great community space (swimming hole).
- Before permitting, ask "What does the wetland do for us?" and "Can restoration return it?" If yes, then consider development with values based restoration.
- Need to be able to trial things. Industry needs a chance to experiment and learn.
- Rules need to be phased in and be clear to allow industry to adapt.
- There needs to be proper assessment first.
- Want to know the values that people want to achieve.
- Function
 - Goal could be maintaining original ecosystem functionality. If it was salmon spawning before, needs to be salmon spawning. You want to know that when it's done, it's returned. You get to a point where you haven't made a difference.
 - It can achieve restoration of the original functionality. It may function in a different way, but it is a 1:1.
 - The metric needs to be based on functionality. Each individual application needs to acknowledge the wetland it's working on. And it comes down to scale - bigger operators will and should have more requirements.
 - Reclamation is not restoration; It is exchanging the original suite of functions and values for new ones.

- It may improve the productive capacity of the land.
- When done under a disturbance threshold approach, it would allow new ground to be mined over time.
- Bonds / securities should be sufficient for effective/meaningful reclamation. This would require more capacity. Could there be an education option, to be viable for small operators? e.g. partner with Yukon U or similar to undertake reclamation work.
- Trade-offs: determine where activity is possible and where areas are off-limits

What are the barriers to reclamation?

- We don't have realistic expectations. Capacity is limited.
- Legislation
 - What does the *Placer Mining Act* say about reclamation?
 - Regulations aren't clear.
 - Required to reclaim ground but no real metrics.
 - No one has stepped up to say this is what has to be done.
 - No guidelines or standard.
 - If the *Placer Mining Act* is opened then you can make specific requirements.
 - There are only a few requirements - soil stability, sediment control, contouring, honouring stream beds (shape and steepness for flow). Nothing specific for wetlands.
- Hard to impose rules
- Regional approach is difficult: Reclamation is done on an individual basis
- Re-creating peat from scratch is hard part, we're moving it. Only thing is the water table.
- Not 'no mining in wetlands' instead 'no mining in unreclaimable wetlands'

What can/cannot reclamation accomplish?

Can	Cannot	Maybe?
Reclaim for values such as moose and waterfowl.	Retain as a carbon sink	Hydrological integrity
	Maintain intrinsic cultural value. No longer connected with history.	Filtration
		Biodiversity
		Benthic diversity
		Permafrost

How should we link reclamation to values?

Reclamation should be based on the values (and management objective) identified for that specific wetland or LMU or region as identified by the Planning Commission.

- It's important that the Commission articulate what the values are.
 - Assess what the values of each wetland is, what values exist?
 - Allow all parties and interests to be part of the conversation and assess each wetland complex
 - TH, YG, Industry, everyone should be setting the standards. What's important to us?
- Baseline:
 - Establish a baseline beforehand.
 - We need to have an agreed baseline set of data so we can ensure reclamation has a starting point.
 - Who / 'what' will make decision of baseline?
 - Everybody has to play their part.
 - Site exploration of values pre-development, then Reclamation plan based on values (similar Alaska)
- Process must be guided by THFA and values identified there.
- Need to maintain data - make it part of the annual reporting, gives you a live idea
- Scale:
 - Commission needs to determine scale
 - Should be at a regional scale, yes Commission's role. More zoomed in, up to others (e.g. YESAB)
 - Needs to be at a landscape level with local considerations. How does this local area affect everything around it?
- Needs to happen faster so that you do not lose cultural connectivity.
- Need to set a timelines goal – e.g. 100 years?
- Have we lost something with YESAB? In the past, everyone had chance to have input. YESAB reports just come out continually, never hear back. Overwhelmed and overworked. Get feeling you don't have the input you once used to.
 - It was written into final agreements in a way that it's designed to be used within context of a land use plan. YESAB almost came too early?
- Importance that animal harvest rights are returned / restored
- Standardise reclamation and evaluation
- Synchronize Plan values with UFA values and rights. E.g. "To preserve a way of life based on spiritual and economic relationship with the land"
- What is 'sacred' and what is 'threatened'
- 'Sustainable Development' → beneficial economic change

- Accept change, how can we guide change in a good way
- In considering 'sustainable development', ensure small operators not shut out as they have less means.

Reclamation Ideas from other Jurisdictions:

- Permafrost can be reclaimed in site-specific areas
- Alaska has a scoring system that impacts returning of a bond
 - Different approach, have more resources and capacity in terms of monitoring and compliance (both Department of Natural Resources and Bureau of Land Management are involved – state and federal)
 - Scoring system measures functionality pre/post activity: key is the work with industry
 - Clear rules, with goal of maintaining functionality
- What can we learn from BC reclamation (Placer mining guide)
 - Key is baseline data of values
 - If it can't be restored, it can't be mined
- New Zealand: water license is the bond and limited number of bonds – has since been retracted (requires further exploration). NZ style mining often efficient with good restoration.

When is reclamation considered complete?

- Differentiate a miner's completion with the restoration of values
- Functionality: when is it reclaimed?
- Look to Alaska: 5 year time period
- 2 scales and impact on regulatory regime
 - Values
 - Proponent
- If restore, try to get as close as possible to original. Requires a baseline, may require 'brakes'
 - Priority mapping of high use areas (triage)
 - By YG?
- If goal is restoration, ecological integrity needs baseline
- Is reclamation ever complete?
- Inspector can determine 1 year later
- When is a valley totally mined? i.e. can continue to return to previously mined sites, therefore reclamation may never be finished and values restored
 - Areas can be remined based on market conditions & innovation
- Be clear about terminology (look to Water Board)

- Challenge is short-term of license, can it be extended for mining & reclamation? i.e. at end of license, operator may not be able to complete reclamation
 - Should be built into the mining plan?
- Have empirical checks, legislation
- “Reclamation” is a narrow term: get that straight with “restoration”.
- Reclamation fulfilling commitment of operator
- Reclamation benefit is relatively straightforward
 - ‘Between 2 years & never’ dichotomy of reclamation and restoration
- Requires good regulatory system
- Requires good monitoring
- Apply security deposits – not returned until it has met a standard and RLUP conformity.
- A wetland may only recover to 50% of its function. Functioning wetland may be the measure used.

Alternative ideas for a Wetland Management system

This section of workshop was about holistic solutions, but not everyone understood that and some of these suggestions may not be considered as such.

- That you’ll run into the same issue, i.e. some wetlands can be reclaimed some cannot. So use the precautionary principle – don’t disturb wetlands, generally.
- What are the goals / values for all wetlands? Are the goals achievable and can they adapt as needed on a broad scale?
- Simple approach:
 - Protect more wetland in Wetlands of Special Importance
 - Do away with Wetland thresholds elsewhere
- Within a watershed approach, does / might this wetland provide key functions to the ecology of the area that will be lost if it is destroyed? If so, it must be preserved.
- Long-term functional impacts on wetlands vs. short-term temporary impacts. Long term impacts should carry more weight than impacts that can be restored.
- Consider what must be done when placer mining and reclamation, or development, or changing wetlands (e.g. agriculture) to ensure wetlands and wilderness and biodiversity will thrive.
- I think starting at the small scale and then thinking / analysing at the next up and then even higher to see how the project impact changes, and then work back down to small scale again to make any changes to the project. When examining the project at each scale, the analysis should consider as many values, communities as possible (be as holistic as possible in linking things together)

- Holistic = ecosystem approach. LMU may not be appropriate (too narrow). E.g. dividing Upper Indian from the rest of the watershed is NOT holistic
- Listening to the community & TH's concerns when enough wetland loss is enough. Preventing socio-ecological tipping points.
- How to protect cultural values, and how to measure how well the system has done at protecting them 10 years down the road.
- Break down the current siloed mindset with regard to the UFA. Manage wetlands using a watershed approach and take all chapters of TH's FA into consideration for aspects that impact wetlands.
- Simplify the management regime and value prioritise protection of representative large intact landscapes.
- How the wetland fits into the overall ecosystem, both localised and at a regional level
- DATA → low cost, standardised data formats → georeferenced photographs / models → drone surveys → standard model available to all parties. Interpretations can vary based on changing values.
- Start with knowing what the values you are trying to preserve / extract are. Can some functionalities be reclaimed / brought back? Then decide in those areas an acceptable approach.
- We are making this too complex. The Draft Plan already recommends protection of the bulk of the wetlands for the region. Let existing policy and regulation control LMU 19: Upper Indian Wetlands.
- Is it possible to off-set the ecosystem services provided by wetlands?
- Does protecting certain wetlands classifications versus wetlands as a whole provide 'certainty' to Proponents or regulators or either?
- Set rules that state an area can only be mined if it can be done in a way that doesn't change the underlying values e.g. you can mine a bog if its still a bog when you're done.
- Each wetland should be evaluated individually, and recommendations can be made for that wetland as to what's important about that particular wetland.
- Hybrid approach:
 - Establish disturbance thresholds for wetland complexes with buggers
 - Larger buffers downstream?
- Connectivity (between wetland classes, LMUs, etc.)
- Climate actions
- Prohibit industrial development altogether in all classes of wetlands within generous conservation areas

- Allow development in wetlands (all classes) elsewhere, subject to best reclamation practices
- Maintaining hydrological connectivity and how it relates to other wetland values
- High level: red light / yellow light / green light
 - LMUs: Red or Green
 - Allow for existing and successor legislation to determine small scale metrics
 - Allow for Draft Plan to guide regulators in determining successor legislation based on Red / Green
 - LMUs: Yellow
 - E.g. Scottie Creek / Upper Indian
 - Greater influence of Plan on operation details → leads to innovation and protection

What is your best advice to the Commission?

- We are all land users in one way or another. We need a land use plan, and appreciate the opportunity to have input and hope to continue to do so.
- The best way to allow some placer mining in a drainage, and also conserve some wetland values, is to limit the placer mining to the furthest downstream sections of the drainage, and then only upstream until some threshold of the rarest wetland class is reached, but leave the sections further upstream intact.
- Best advice:
 - Ensure that good baseline information is gathered prior to any significant development, including placer mining.
 - Clearly articulate expected standards for development.
 - Do not compromise on vision.
- Low impact prospecting & sampling and mapping potential economic mineral deposits / ore bodies should be allowed on most / all land (less than 1% may be economic)
- Don't put all your eggs in the reclamation OR restoration bucket – some values cannot be reclaimed or restored. Think about your overall vision and goal for wetlands in this region, and do not get bogged down in the economic and ecological complications. Use the THFA as your playbook, and consider the objectives within it and how they relate to wetland management (ch. 14, etc.). Try to vocalise these values and objectives, whether region wide or at each wetland complex. Once that is clear, seek the thresholds and management directions to match those goals and objectives, or let the Parties do that.
- Best advice:
 - Back as close to original

- Give back to ecosystem
- Reclamation ≠ restoration
- Exchange some functions for economic prosperity
- Carbon storage → reclamation objectives. Beyond scope? If using thresholds, need this.
- Regulate and monitor
- 2 years?! – permanent (in lifetime)
- BE BOLD!
- Find a balance, consider the size and scope of activity in LMUs, the land use planner area and the Yukon. Development can be sustainable as long as the industry can know the objectives, and is given the opportunity.