

NATURAL RESOURCES SECTOR¹:

TRANSFORMATION AND TECHNOLOGY PLAN

MINISTRIES/AGENCIES:

ABORIGINAL RELATIONS AND RECONCILIATION (ARR)

AGRICULTURE (AGR)

ENERGY (ENG)

ENVIRONMENT (ENV)

FORESTS, MINES AND LANDS (FML)

NATURAL RESOURCE OPERATIONS (NRO)

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¹ “Natural resources sector” is the term identified by the DM Committee on Technology and Transformation (TT) for describing the natural resource focussed government ministries/agencies for the purposes of developing the TT plan.

SECTION 1 - VISION and BUSINESS CONTEXT

The Present

The natural resources sector (NRS) is the largest and most complex sector in government in terms of the number of ministries that interact with one another on an ongoing basis. In total, there are 6 ministries which make up the natural resources sector. They include the Ministries of Aboriginal Relations and Reconciliation; Agriculture; Energy; Environment; Forests, Mines and Lands; and Natural Resource Operations. While each organization has its own mission and a different set of goals, they all have one thing in common – the province's land base. This sector oversees the use of more than 90 percent of the land in the province.

The sector carries out its business through monitoring and assessment, permitting and approvals, standards and regulation, protection, compliance and enforcement activities and creating a competitive and innovative environment. Collectively, the sector leads the development and management of all of our Province's natural resources including energy, mining, petroleum, forestry and range lands, agriculture and food, fish and wildlife, water and air among others. The sector brings billions of dollars into the BC economy through mining, oil, gas, forests and agriculture. It protects and conserves natural resources by fostering sustainable environmental management practices. The sector also represents the Province in treaty negotiations and provides information and guidance on First Nations and treaty matters across government. Overall, this sector is a major force and contributor towards building a strong economy and vibrant communities while ensuring future generations can enjoy British Columbia's natural resources.

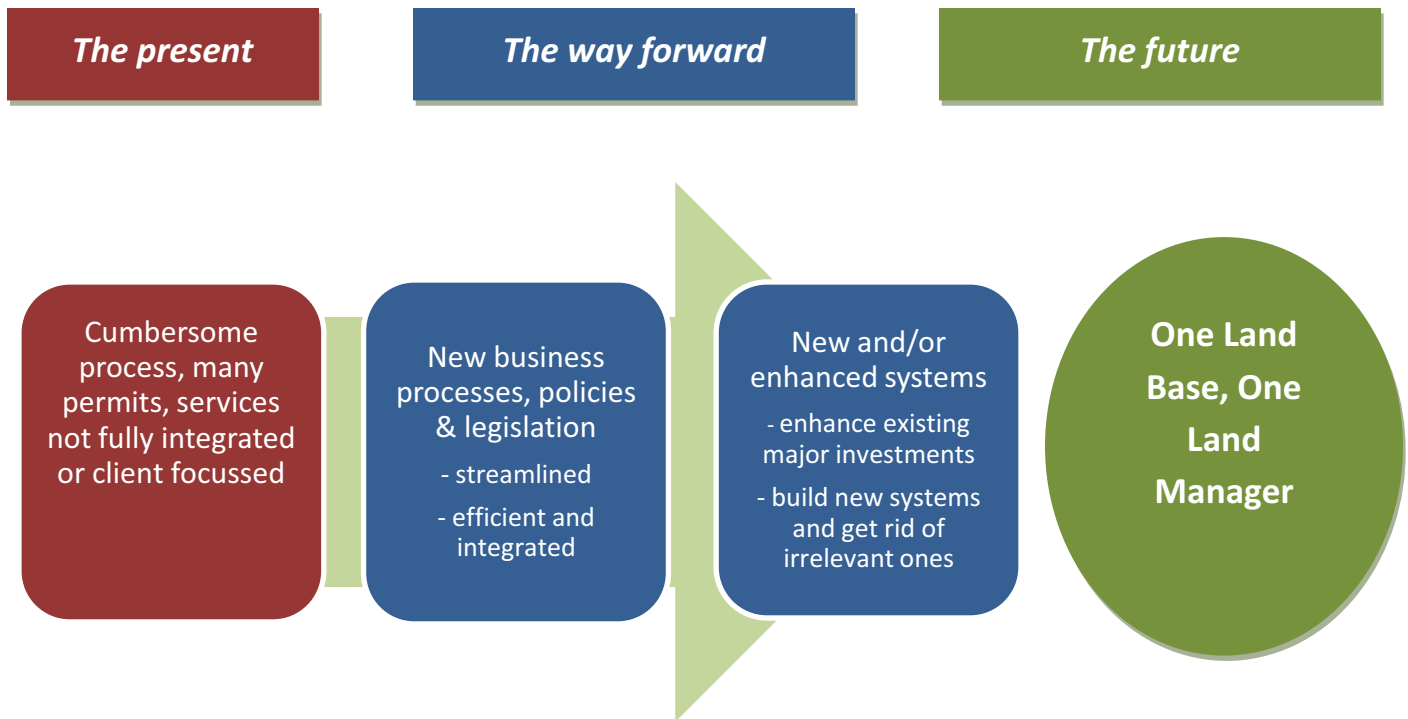
NRS clients are very diverse and are served by over 5,000 employees who work in over 50 different communities throughout the province. Clients can range from the world of corporate industry in urban centres to single business owners in rural communities. Clients include farmers, miners, trappers, foresters and others. Broadly speaking, clients of the NRS include the public, local governments, Treaty nation governments, First Nations, Aboriginal organizations, a wide range of resource development companies, business and sector associations and special interest groups. Given that many clients reside in rural communities, it is important that the NRS consider unique rural needs as it moves forward with its transformative change.

The Future

In order for the sector to remain globally competitive, environmentally responsible and responsive to client needs, effective management of the land base requires a bold new approach. A new paradigm which drives the change for efficient, integrated and client centred services is needed. This shift is built upon a more flexible framework, improved business processes, and enhanced/new systems. It means that British Columbia's land base is managed in a coordinated and seamless way so that values of the sector can be realized- **"One Land Base, One Land Manager"**. These values include:

- Global competitiveness - enhanced economic activity for the long-term
- First class stewardship - providing environmental management oversight
- Sustainability - ensuring conservation and preservation of natural resources so they are available for present and future use

The future of the natural resources sector is one that capitalizes on new businesses processes such as establishing one process for one project, single land management decision makers and emerging technologies for improved client centred and integrated services. It is a future where investment opportunities increase through our business transformations, enhancements in technology and the way the sector engages and interacts with its clients. The sector is regarded by clients as approachable and efficient as services are quick, straightforward and easy to navigate. It means government's online services are modernized so they are shaped by clients' needs rather than by the structure of government. It is a future that reduces costs as a result of becoming more efficient in its operations. This vision of the NRS supports a sustainable environment and a competitive, vibrant resource based economy.



In order to achieve its vision, the sector needs to focus on reviewing its current framework of legislation, policies and business processes which, in turn, will drive the necessary system changes. The sector needs to find and implement new ways of managing its lines of business. It will shift from face-to-face mainly interactions to more online service delivery and consultation options. Attention will also be paid towards smaller clients in rural areas that have limited network access. It is only with a comprehensive shift of its traditional ways of doing business that the NRS be will able to move towards transformative change. On some accounts, the sector has already begun to make progress in its shift toward self service, client participation and business innovation.

Self service initiatives already include archaeology permits, aquaculture licensing, freshwater fishing licences, park use permits, Virtual FrontCounter BC, waste permits, water licensing, mineral tenuring and mapping services. However, there are many additional opportunities for online services to provide a much broader range of self service options for NRS clients.

As well, the Treaty Obligation Tracking system (TOTS) and the Treaty Information Management system (TIMS) have been profiled internationally and nationally by Microsoft as part of their launch of SharePoint 2010 software.

The sector has also been progressive in its approach to data management as it has provided access to more than 200 data sets from a centralized facility. The sector has utilized new technologies for public consultation through *Living Water Smart*, the Fossil Management Framework, wildfire social media and the environmental assessment process.

From a business innovation perspective, the NRS is developing a strategic approach for facility co-location land management and economic opportunities across the sector to ensure cost efficiencies as well as to better support local coordinated business models. This strategy will confirm roles and ensure a coordinated approach to facility co-location. This means that client service can be simplified (e.g. Front Counter) and it will allow a corporate enterprise lens with respect to cross government integrated service delivery.

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Transformational changes to the sector's key delivery channels can have wide ranging positive effects on government/client relations. This includes increasing the number of the clients served, improving the timeliness and quality of land management decisions and interaction with the client, and decreasing client costs. Improved relations with clients can translate into increased business opportunities for investment as well as better protection of natural resources.

Pressures

While transformational change is necessary, there are many pressures that could impact on the ability of the sector to change.

The NRS faces increasingly complex land use issues as natural resource decisions can be complicated, cross administrative boundaries and involve complex First Nations consultations. Capacity to participate in consultation and engagement processes is an ongoing issue for both First Nations and the NRS.

It is no longer practical for businesses and citizens to navigate government's organizational structure to apply for an authorization or to gather information for their needs. Reducing duplication for clients providing the same or similar information to various government workers, streamlining processes, finding efficiencies among business processes and engaging with clients in meaningful dialogue is driving change within the sector. In the end, this will result in reduced costs and improved service for the client.

Evolving technology, complex tasks and greater service expectations from clients is changing the way the sector approaches its business. Clients have a broad range of technical skills that drive their readiness to engage in e-government services. Consequently, client needs are becoming increasingly sophisticated and demands on sector staff are increasing. This applies pressure on staff to stay current with rapidly changing technology while still meeting service expectations. The mosaic of outdated government policies and legislation continue to create an environment of complexity and challenges for staff. Business transformation is required to simplify complex tasks.

Volatility in world financial markets has had significant impacts on investment levels in the province. Investment dollars move readily around the globe to jurisdictions that provide the highest net return for

given levels of risk. Therefore, streamlining processes, making information more readily available and engaging clients in different ways is necessary to ensure British Columbia remains competitive.

For the shifts to occur, key delivery channels will depend on ensuring that existing major investments are enhanced in order to support the new way of doing business. Older systems will need to link seamlessly to new systems in order to serve the sector's clients. Collectively, the NRS maintains over 430 systems. Some of these systems need to be maintained and enhanced in order to lead transformative change. Other systems could be shut down because the purpose for which the system was built is no longer relevant which would free up resources to support the systems required for transformational shift.

These pressures create the impetus for coordination among the land base agencies which will result in better overall service to the clients, a more competitive investment climate and improved sustainable natural resource management.

SECTION 2 - ALIGNMENT TO STRATEGIC SHIFTS

Sector Opportunities

The Natural Resource Operations Management Board² (Board) has mandated investigation into a number of important business transformation opportunities³ that will enhance the NRS's overarching goal that British Columbia's land base is managed in a coordinated and seamless way so that values of the sector can be realized – "One Land Base, One Land Manager". These opportunities were chosen because they are key drivers for transformational change. Recognizing that some of the opportunities are more important than others for providing the platform for change, the Board has ranked the opportunities.

The 4 priorities chosen by the Board were:

1. **One Project, One Process** streamlines and coordinates all necessary authorizations for a single land based project in order to provide better service to clients and to improve the natural resources sector's internal administration efficiency. This priority is focussed on improving the client experience, timelines of interactions and approvals related to the land base and reducing costs. It will implement one consultation and referral process for the use of land and it will be flexible in its ability to bundle authorizations or manage them separately. This priority will allow use of a common tool set, allow tracking of impacts to the land base and be nimble in its ability to allow for transfer of statutory authority.
2. **Open data** are accessible, reliable, and useable by clients and businesses which meet their information needs for planning, investment decisions, transparency and engagement. The priority is focussed on making raw data available and useable to its clients for their use.

² This was the former Integrated Land Management Bureau Board of Directors.

³ These priorities were the outcome of the Board's survey of ADM CILM.

3. **E-service delivery** is a coordinated and integrated set of services supporting natural resource regulatory agencies to deliver fast and efficient client centred services. E-service delivery can be viewed as a spectrum of service offerings designed to meet a range of service needs. This priority is about delivering simple client centric transactional service currently performed manually to be made available online.
4. **Public consultation** uses technology as a key component for public engagement in order to successfully manage complex resource management issues. This transformation for public engagement has two overarching shifts. It calls for a set of tools and procedures to be created and a common web portal for all sector engagement activities.

These four priorities align with the three strategic shifts of Self Service, Citizen Participation and Business Innovation. The chart below indicates the alignment of each priority noting that in some cases, the priority aligns with more than one strategic shift.

Priority	• Strategic Shift
One Project, One Process	• Business Innovation/Self Service
Open Data	• Citizen Participation/Self Service
E-Service Delivery	• Self Service
Public Consultation	• Citizen Participation/Self Service

Enablers

The NRS is committed to leveraging existing investments both within and outside the NRS. For example, there is the opportunity to take advantage of the case management system being developed by government. There is also the opportunity to link to the Health Sector in terms of water, air and demographic data management and integration. Existing NRS investments can be leveraged corporately with potential new investment in infrastructure, data and applications. High speed networks, an enabler identified in the IM/IT strategy, will be critical to the success of distributing natural resource sector data and services throughout the province. Much of the focus of the first year will be on getting enablers in place such as planning and reviewing legislation, policy and business processes.

Limitations

Achieving sector priorities will require significant and thoughtful policy, governance and technology reform. This is particularly the case involving core information systems that will require substantial

upgrading to meet the demands of better integration and improved efficiencies. These core systems, which manage hundreds of millions of government revenue and critical land and resource data, need to be maintained while enhancements are undertaken.

Each area in the natural resources sector has its own unique priorities. Clear direction is required as to how the sector needs to behave in order to move towards transformative change since collaboration is still an early practice. Limited capital and operational funding will challenge our collective ability to transform our business. Strong leadership, dedicated teams and resources are essential to ensuring a successful outcome.

An important limitation to implementing this transformation is that technology cannot stand alone. The necessary business processes must be developed before any system changes. We will work towards strengthening our policies, business processes and legislation so that barriers are removed to moving forward in a transformational way.

Focus in the First Year (2011/12)

For the first year of the transformation and technology plan, the sector will focus on setting up the platforms (legislative/policy, business process and system requirements) on which transformative change will occur.

For the upcoming year of 2011/12, the natural resources sector will focus on the following key themes:

- 1) The NRS will complete its review of legislation, business processes, and systems requirements. This includes a review of policies, authorization mechanisms, administrative duplication and barriers. Business process redesign work and the development of business requirements will be undertaken including leveraging initiatives already underway. This activity supports priority #1 – **One Project, One Process** and the strategic shifts of **Business Innovation** and **Self Service**.
- 2) The sector will focus initial efforts on maintaining its published data holdings and will work with the Data BC team to understand, plan and design open format delivery. As standards are identified, the scope of this activity could expand as none of the sector data may meet the published client centric standard. Identification of more data that clients would like released will also be a focus. This activity supports priority #2 – **Open Data** and the strategic shifts of **Citizen Participation** and **Self Service**.
- 3) The sector will identify opportunities for simple client centric transactional services to be made available online. The focus will include business process reviews, potential integrations, standards, procedures and processes. This activity supports priority #3 – **E-Service Delivery** and the strategic shift of **Self Service**.
- 4) Working with the Government Chief Information Office and the Workforce Planning and Leadership Secretariat, the NRS will outline a set of procedures and online tools for public engagement that are based on best practices and will link to upcoming consultations. This activity supports priority #4 – **Public Consultation** and the strategic shift of **Citizen Participation**.

Specific Priority Projects in the First Year (2011/12)

The NRS undertook a process to identify key IM/IT projects (Section 3) which could begin April 1, 2011. After a thorough review of potential priority projects, it was discovered that while many of the projects were transformational in nature, they were not ready to be forwarded through the IM/IT process at this time. Best practise dictates that business requirements need to be completed before system construction is started. While much work has occurred in some areas, and some business planning is underway, comprehensive business requirements have not been completed.

Recognizing that some projects could be ready in a year from now (e.g. fall of 2011), the NRS sector will look to realign existing capital dollars in 2011/12 as required in order to support high priority projects. The NRS sector has been advised by the Office of the Chief Information Officer that this is an acceptable and strategic approach to supporting business ready projects should they require capital funding mid stream in 2011/12. Such an approach will provide a firm foundation to submitting solid transformational IM/IT projects in 2012/13. Should capital realignment occur, SSBC will be a partner in the project specification and any infrastructure needs.

Three projects have been identified for moving forward to develop comprehensive business requirements for the next year. The projects are:

1. Streamlining workflow processes across the complex land base sector to offer client centric services **(One Project, One Process priority)**- there are numerous activities associated with this priority project including streamlining records management, automating referrals, creating a single project ID for each project, creating a single point of status and much more. On their own, these activities may not appear transformational, but collectively they will drive the transformative move to the NRS vision of "One Land Base, One Land Manager".
2. Identifying, publishing and improving access to NRS data **(Open Data priority)**- it will improve public access to data to help inform investment/environmental decisions and develop custom linked data products to meet priority business needs
3. Developing a public engagement framework that will enable efficient timely public engagement **(Public Consultation priority)**- it will develop a range of approaches that will allow each subsequent project and process to benefit from the combined cross sector effort, with portability across all government agencies

The specific work that will be carried out next year includes, but is not limited to, the following:

- Identify legislative or policy processes that need to be aligned/changed before the transformational activities starts. If legislative changes are required, get a scheduled date before the legislature
- Ensure the various business areas have identified the business processes that need to be changed and that they have detailed plans. Ensure that operational funds and staff resources have been identified and are committed to make these changes.
- Perform impact analyses against downstream systems, understand what changes need to be made to our systems, and confirmed that ministries will continue to support targeted systems

- Develop a timeline and work with multiple agencies (including GCIO, SSBC and Workforce Planning and Leadership) to ensure alignment with enablers and corporate infrastructures

SECTION 3 – IM/IT Investment

The natural resources sector is moving towards creating, what is in essence, a fully integrated client management system which will support the vision of “one land base, one land manager”. Policy, authorizations and First Nations consultation are just some of the key factors that need to be integrated into a client management system. Developing the business case for such a system is a major undertaking. The first phase of this initiative will build upon the existing foundations and work that are already underway. A transformation project team will lead this first phase. While no capital funding is requested this year, we are submitting a place holder in Section 3 for future years.

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