

# **A Report for Ministry of Citizen's Services**

---

## **NRPP/NRS IMIT Organizational Assessment**

Final Report  
8 March 2018  
Engagement: 330045886

## Table of Contents

|  |           |
|--|-----------|
| <b>Executive Summary .....</b>   | <b>1</b>  |
| <b>Engagement Approach .....</b>   | <b>3</b>  |
| <b>Observations - Findings .....</b>                                       | <b>4</b>  |
| <b>Analysis &amp; Conclusions .....</b>                                    | <b>5</b>  |
| <b>Recommendations .....</b>   | <b>7</b>  |
| <b>Appendix 1: Organizational Structure Options for Consideration.....</b> | <b>9</b>  |
| <b>Appendix 2: Gartner Research.....</b>                                   | <b>12</b> |



## Executive Summary

In January 2018, Gartner was engaged to conduct a high-level, functional organization assessment of both the Natural Resource Permitting Project (NRPP) / Natural Resource Transformation Secretariat (NRTS) and the IM/IT services provided by Natural Resource Sector (NRS) IM Branch. The intent of the assessment was to provide the senior executives within the NRS Ministries and the Provincial Office of the Chief Information Officer (OCIO), with a clear understanding of the current challenges that exist and to identify opportunities for improving the effectiveness of both organizations.

Gartner reviewed a number of previous internally and externally prepared reviews that had been conducted over the past three years, and interviewed key stakeholders across the six Natural Resource Sector Ministries, to identify, inform and validate observations and findings. We were not asked to formally evaluate either NRPP or NRS-IMIT, and our findings are based on the perceptions of the broad group of NRS stakeholders we interviewed.

A number of consistent findings and opportunities emerged from our discussions with stakeholders:

- The IMIT function across the NRS Ministries is a large and complex undertaking. In working with other public sector entities of similar scope and scale, we would typically see this portfolio being managed by a single, dedicated ADM-level resource, who would oversee and be fully accountable for all IMIT across the Sector.
- While funding constraints have limited the Program's scope and ability to deliver, stakeholders indicate that the NRPP/NRTS has not delivered the expected business outcomes for Phase 1. In addition, stakeholders clearly see significant service delivery overlap and resulting conflict and inefficiency between NRPP and the NRS-Information Management Branch (IMB). They are now looking for an end-of-program strategy and transition plan for NRPP/NRTS.
- Stakeholders indicate they would like to see a single IMIT organization and leader to manage ongoing NRPP/IMB projects and IMIT operations and services across the NRS. They are looking for a single, fully integrated set of IMIT capabilities that will support their business objectives.
- Business stakeholders across all six Ministries are looking for more effective engagement from their internal IMIT service providers to enable their business transformation (modernization/optimization/improvement) initiatives and deliver better business outcomes.
- There are some shared service opportunities across the NRS that can be further explored. This will require a new mandate and common/aligned NRS strategy and business priorities.

Based on the observations/findings and our experience working with other clients in similar situations, we make the following recommendations:

- 1) A new dedicated, ADM-level "NR Sector CIO" role be defined and posted as soon as possible. This new role should have full responsibility and accountability for all NRS IMIT staff, services and projects.
- 2) A Transition Plan should be developed to provide for the expedient close-out of NRPP/NRTS - ensuring the smooth transition of people, capital/operating funding dollars and existing or ongoing projects to IMIT as soon as is reasonably possible (within the next 3-6 months).

- 3) The NRS Deputy Minister Committee (DMC) discuss a refreshed approach and organizational mandate for “transformation” across the NRS Ministries. This discussion should also include a review of options for where to assign the transformation portfolio in the NRS organizational structure

Gartner would like to thank all stakeholders to this review for their candid, open and responsive assistance in helping to identify issues and solutions to improve the delivery of IMIT services and transformation initiatives within the NRS Ministries. Further analysis and effort is needed to define the transition plans and re-align, where needed, to continue to address the very common challenges that come with implementing IT-enabled transformation within a highly complex and evolving natural resources sector.

## Engagement Approach

In January 2018, Gartner was engaged to conduct a high-level, functional assessment of both the NRPP/NRTS and the IMIT services provided by NRS IMB Branch. The intent of the assessment was to provide senior executives within the NRS Ministries and the Provincial OCIO, with a clear understanding of the current challenges that exist and to identify opportunities for improving the effectiveness of both organizations.

It is important to note that Gartner was not asked to evaluate the performance or validate the achievements of either the NRPP or the CSNRS IM Branch. We have relied strictly on the documentation review and stakeholder interviews to generate our findings, and then applied our experience and Gartner Research for organizational and business transformation best practices to develop our recommendations.

To conduct the assessment, Gartner reviewed a number of internally and externally prepared reviews that had been completed over the past three years. These included:

- NRPP & NRS-IMB Governance Review (external 2015)
- NRPP Health Check (external 2017)
- NRPP Progress Report for the NR Board (internal 2017)
- NRTS ISSS Platform Review (external 2017)
- CSNRM - IM Branch Business Plan (internal 2017)
- NRPP Phase 1 Review (internal 2018)

These documents provided us with context and insight into some of the pre-existing challenges for NRPP and IMB prior to our interviews.

Following the documentation review, we interviewed key stakeholders across the six Natural Resource Sector Ministries, to identify, inform and validate observations and findings. Over a two week period (Feb 19/18 to Mar 2/18) we conducted interviews with the following NRS stakeholders:

| Interview           | Title                                     | Ministry              |
|---------------------|---|-----------------------|
| Tim Sheldan         | Deputy Minister                           | FLNOR                 |
| Jill Kot            | Deputy Minister                           | CITZ                  |
| Mark Sieben         | Deputy Solicitor General                  | PSSG                  |
| Dave Nikolejsin     | Deputy Minister                           | EMPR                  |
| Mark Zacharias      | Deputy Minister                           | ENV                   |
| Kevin Jardine       | Associate DM                              | ENV-Assessment Office |
| Mary Sue Maloughney | (past) ADM Integrated Resource Operations | MMHA                  |
| Andrew Calarco      | ADM                                       | FLNOR-IROD            |
| Wilf Bangert        | ADM                                       | FLNOR-NRTS            |
| Trish Dohan         | ADM & EFO                                 | FLNOR-CSNR            |
| Wes Boyd            | ADM & EFO                                 | FLNOR-CSNR            |
| Fraser Marshall     | Executive Director                        | EMPR-CIB              |
| Denise Rossander    | Executive Director                        | FLNOR-IMB             |
| Todd Glover         | Senior Enterprise Architect               | FLNOR-IMB             |

## Findings

The observations/findings from our interviews with stakeholders are briefly summarized below. We have grouped them into the following categories: 1) *Overlapping Mandates & Services*, 2) *Business Stakeholder Engagement*, and 3) *Business Transformation*

### **Overlapping Mandates & Services,**

The original vision for NRPP was to include new, and better aligned citizen services, business process improvements and automation through technology, as well as any required changes to legislation. Only partial funding was approved for the Program, and the NRPP vision was never re-scoped or rationalized to reflect this change. Over time, stakeholders have seen a disconnect between the original vision and the technology-based shared service projects that have been delivered by NRPP over the past four years.

Stakeholders indicate that the IMB has successfully delivered IT-enabled transformation and modernization projects for NRS Ministry business areas, and a number of business “transformation” projects have moved between NRPP and IMB. As a result, business stakeholders feel that both NRPP and IMB as undertaking “transformational” work related to IMIT, and see a services and capabilities overlap between NRPP and IMB; with resulting conflict, between NRPP and the NRS IMIT function (IM Branch). They indicate that there is an opportunity to consolidate/integrate NRPP and IMB in order to improve efficiency and operating effectiveness of IMIT across the NRS. Stakeholders also look to other Ministries/Sectors across the Province and believe that a dedicated ADM-level, Sector CIO is required for the IMIT function to be fully successful across NRS.

### **Business Stakeholder Engagement**

We heard that NRPP’s priorities and projects are, in some cases, not aligned to current NRS Ministry business priorities, and over time there has been a shift from business transformation and business-driven outcomes, to a focus on technology projects. They also feel that IMIT’s engagement with business areas needs to improve, and that the NRS Ministries need a single IMIT organization with responsibility for understanding business requirements/expectations, and for supporting and delivering desired business outcomes.

### **Business Transformation Opportunities**

Stakeholders do not believe that transformation-based collaboration is well aligned across NRS Ministries, and do not see a clear strategy across the Sector which could identify/provide shared priorities for common, shared services and/or capabilities. Stakeholders feel that the remaining “modernization” initiatives that have been identified in NRPP still have value, but the likelihood of delivery success is low, because there is no single accountable resource with responsibility for projects and operational support, lifecycle management of the new application, clear business ownership, and resources to deliver and maintain. They also indicated that governance for (NRPP-led) business transformation needs to be driven more by business stakeholders, and that the metrics/measures of success should focus more on the delivery of business outcomes. Finally, stakeholders indicated that the Strategic Policy Secretariat has started to develop a common/shared strategy and set priorities across NRS, and that there may be an opportunity to leverage this work and help steer/drive transformational opportunities across the sector.

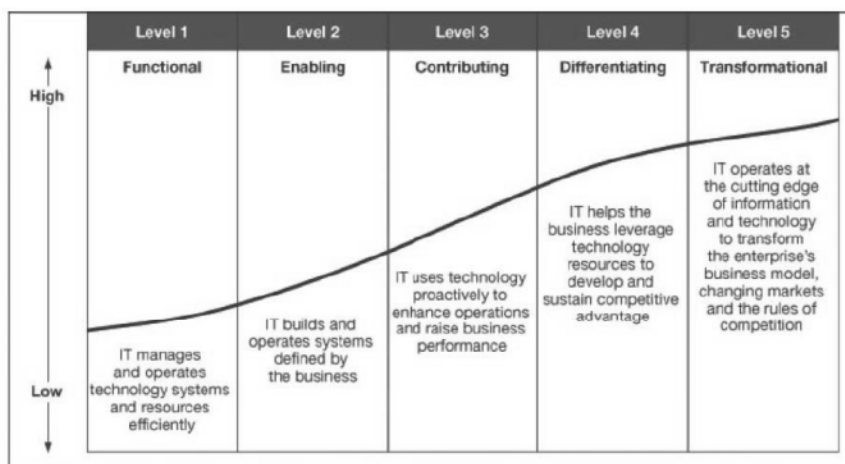
## Analysis & Conclusions

A number of consistent findings and opportunities emerged from our discussions with stakeholders:

- The IMIT function across the NRS Ministries is a large and complex undertaking. Based on stakeholder feedback, and what we have seen in other public sector entities of similar scope and scale, we believe that the NRS Ministries **require a single, dedicated ADM-level resource to oversee Sector IMIT (IM Branch) and be fully accountable for all NRS IMIT.**
- While funding constraints have limited the Program's scope and ability to deliver, stakeholders indicate that the NRPP/NRTS has not delivered the expected business outcomes for Phase 1. In addition, stakeholders clearly see significant service delivery overlap and resulting conflict and inefficiency between NRPP and IMB. **They are now looking for an end-of-program strategy and transition plan for NRPP/NRTS.**
- Stakeholders indicate they would like to see a single IMIT organization and leader to manage ongoing NRPP/IMB projects and IMIT operations and services. **They are looking for a single, fully integrated set of IMIT capabilities that will support their business objectives.**

Gartner Research indicates that IT organizations have traditionally concentrated on acquiring technical resources and growing technology-based capabilities. Their main role was to develop and deliver proper IT infrastructure and applications to fulfill business needs as requested (Levels 1 and 2 in the figure below). The faster pace of technological innovation and globalization, are changing how the enterprise conducts business. Now the enterprise expects a greater contribution from IT and demands new ways to exploit resources associated with it. Thus, IT organizations must become less technology-focused and more business-focused, and shift from back-office to front-office management capabilities.

Figure 5. The role of IT can be described with demonstrated capability level



Source: Gartner.

- **Business stakeholders across all six Ministries are looking for improved/more effective engagement from their internal IMIT service providers** to enable their business transformation (modernization/optimization/improvement) initiatives and deliver better business outcomes.

*"With nearly 50% of technology spend projected to occur outside of the IT department by large enterprises pursuing a digital business strategy by 2020, CIOs need to promote an enterprise view of how information and technology contribute to business outcomes and capabilities, yet few do". – Gartner Research Jan 2017*

Gartner believes that higher levels of IT organization and business transformation maturity require that the IMIT function operates as an external service provider would. This means working in a consultative mode with business stakeholders, listening to understand problems and opportunities, offering advice (and proposals) to resolve them and focusing on business outcomes.

- Some of the observations identified in the Transformation section are representative of common challenges faced by public sector organizations when undertaking IT-enabled business transformation. These common challenges are compounded in this situation by the inter-organizational complexity that results from working with, and across, six different NRS Ministries. **There are some remaining shared service opportunities across the NRS than can be further explored. This will require a new mandate and common/aligned NRS strategy and business priorities.**

Gartner Research, and our work with other public sector clients, indicates that transformation leaders struggle with determining how to successfully navigate change and ensure the business outcomes are achieved. Organizational change activities often are reinvented for every program, wasting time and not building on successful techniques from past efforts. Transformation initiatives are frequently launched without laying the groundwork to ensure impacted business executives are on board and share common expectations about the outcome. This sets the stage for politic and unrealistic expectations that can derail a transformation initiative. The nature and purpose of the change effort are often misunderstood, and the impact of the changes are underestimated, because there is no clear understanding of the future and what the magnitude of change is from how work is currently being performed.

## Recommendations

- 1) A new dedicated, ADM-level “NR Sector CIO” role be defined and posted as soon as possible. This new role should have full responsibility and accountability for all NRS IMIT staff, services and projects.
  - New ADM/Sector CIO will need to develop a strategy/plan in the near term that will address (i) concerns regarding IMIT capabilities to support business requirements, (ii) organizational capacity to support workload/business demand for IMIT and (iii) organizational process maturity (portfolio/investment management, demand management, governance, project delivery etc).
- 2) A Transition Plan be developed to provide for the expedient close-out of NRPP/NRTS - ensuring the smooth transition of people, capital/operating funding dollar's and existing or ongoing projects to IMIT as soon as is reasonably possible (the next 3-6 months).
  - The Transition Plan team will need to work with People & Workplace Strategies staff to identify all Human Resource transition requirements and issues, and ensure that all government employees currently embedded in NRPP/NRTS find suitable positions/roles elsewhere in the NRS Ministries.
  - The development and implementation of this plan will require senior executive oversight, as well as new operational funding for the duration of the transition period.
  - The Transition Plan should also include a business-led review of all ongoing NRPP projects that would identify and validate business value and specific business outcomes from the projects and identify the following for each:
    - i. business owners, with clear identification of their responsibilities and accountabilities with regard to the project and the change management activities and operational support.
    - ii. expected business outcomes and/or business value, along with business-focused success metrics; each project should be aligned to either NR Sector shared business priorities or individual Ministry business priorities.
    - iii. capital funding requirements for completion and/or commissioning, including all documentation and go-live support.
    - iv. ongoing operating requirements (funding \$'s and resources), and
    - v. updated project/operational plans for each of the transitioned projects.
- 3) The NRS Deputy Minister Committee (DMC) agree on a refreshed approach and organizational mandate for “transformation” across the NRS Ministries. This discussion should also include a review of options for where to assign the transformation portfolio in the NRS organizational structure (see Appendix).
  - This will require that business leadership across NRS and NRS-IMIT have a common vision of the transformation and are able to articulate "why" the change is happening to guide expectations within their respective areas. NRS leadership will need to define the post-transformation target state along with as-is analysis to identify what is changing and who will be impacted. And, they will need to invest beyond the IMIT function/program to develop reusable organization change capabilities.

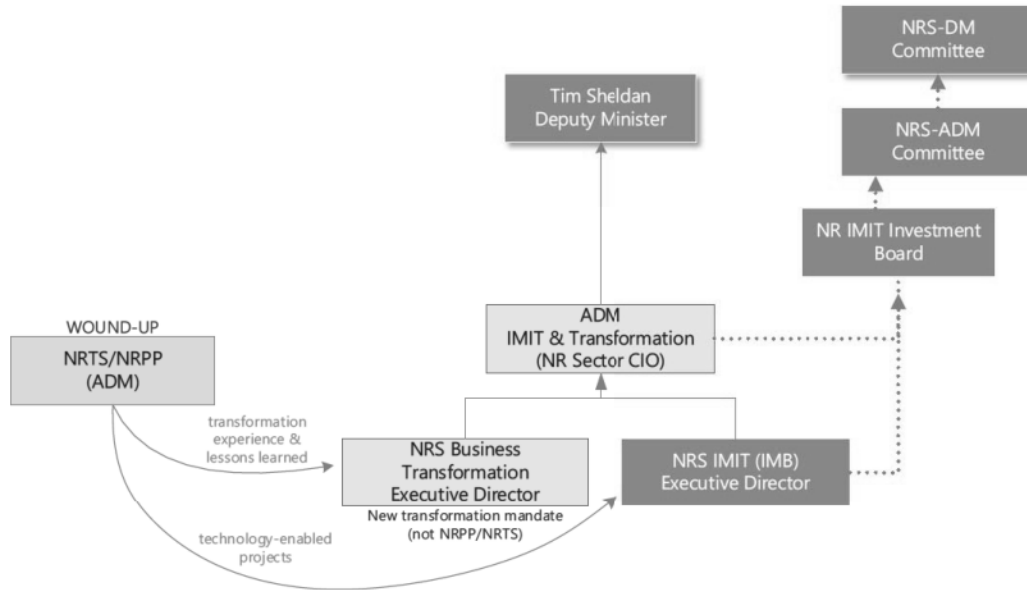
## APPENDICES

---



## Appendix 1: Organizational Structure Options for Consideration

### OPTION #1



Option 1 provides for the creation of AN Executive Director – Business Transformation under the Sector CIO/ADM.

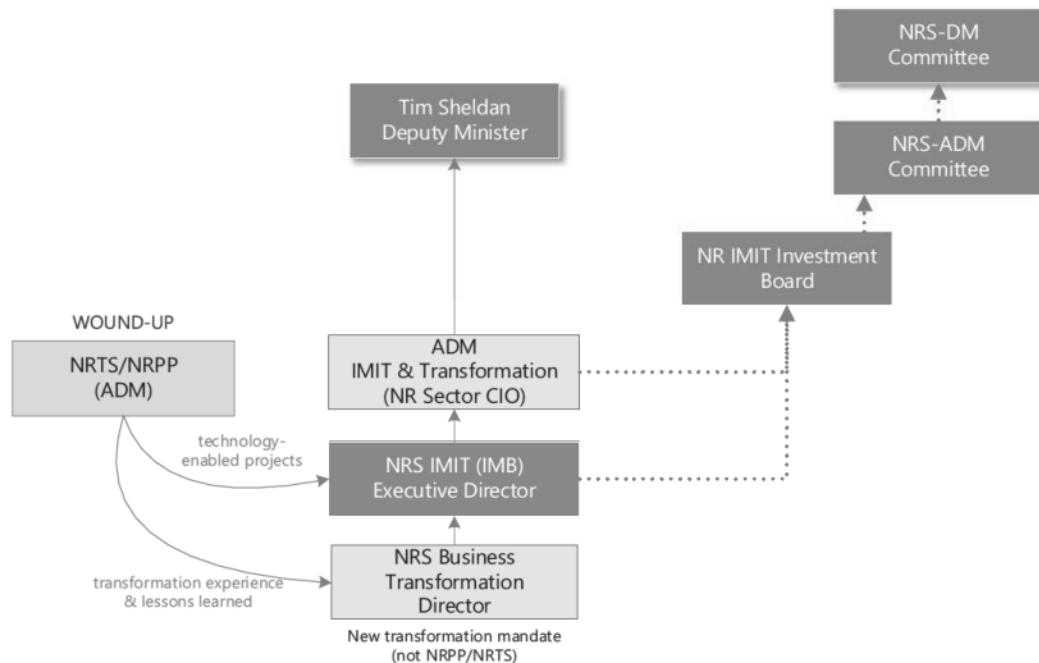
#### Changes:

- NRPP closed out and existing projects, applicable resources and capital/operating funds are transitioned to new “IMIT & Transformation” Division
- New ADM role - “NR Sector CIO”
- New Exec Director role – “Business Transformation”; with refreshed mandate for supporting and enabling business transformation (modernization/optimization) initiatives across the NRS Ministries

#### Considerations:

- Timing of NRPP/NRTS wind-up is critical (i.e. - sooner rather than later)
- “Business Transformation” terminology has been potentially been overused and may not be effective going forward
- Require a Transition Plan for existing NRPP staff, existing technology projects and associated capital/operating \$’s to IMB, along with a value-based review of existing projects
- Require new mandate, leadership and resources/operating funding \$’s for Business Transformation unit

## OPTION #2



Difference between Options 1 & 2 is the extent to which NRS wishes to emphasize the transformation mandate/agenda going forward. In Option 2, the position does not directly report to the ADM, instead is a Director-level role under the Executive Director of the IM Branch.

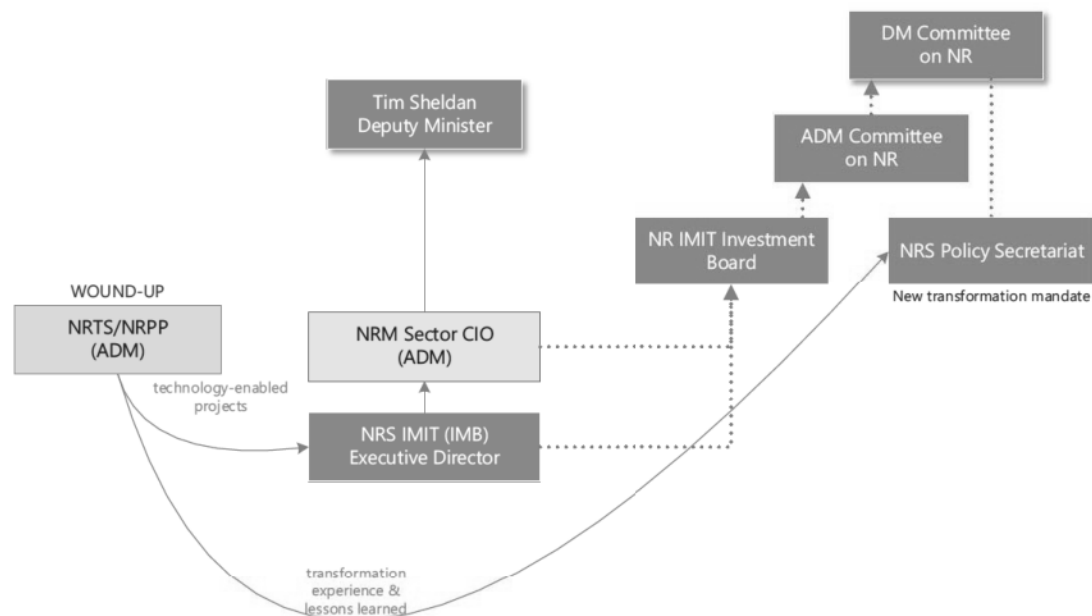
### Changes:

- NRPP closed out and existing projects, applicable resources and capital/operating funds are transitioned to new "IMIT & Transformation" Division
- New ADM role - "NR Sector CIO"
- New Director role - "Business Transformation"; with refreshed mandate for supporting and enabling business transformation (modernization/optimization) initiatives across the NRS Ministries

### Considerations:

- Timing of NRPP/NRTS wind-up is critical (i.e. - sooner rather than later)
- "Business Transformation" terminology has been potentially overused and may not be effective going forward
- Require a Transition Plan for existing NRPP staff, existing technology projects and associated capital/operating \$'s to IMB, along with a value-based review of existing projects
- Require new mandate, leadership and resources/operating funding \$'s for Business Transformation unit

### OPTION #3



Option 3 assigns responsibility (for at least the shared vision and priorities) of the refreshed transformation mandate/agenda with the NRS Policy Secretariat.

#### Changes:

- NRPP closed out and existing projects, applicable resources and capital/operating funds are transitioned to new "IMIT & Transformation" Division
- New ADM role - "NR Sector CIO"

#### Considerations:

- Timing of NRPP/NRTS wind-up is critical (i.e. - sooner rather than later)
- "Business Transformation" terminology has been potentially been overused and may not be effective going forward
- Require a Transition Plan for existing NRPP staff, existing technology projects and associated capital/operating \$'s to IMB, along with a value-based review of existing projects
- Require new mandate, leadership and resources/operating funding \$s for Business Transformation unit, and need to determine if transformation "delivery/implementation" resources will reside with the Policy Secretariat or whether those resources and skills will reside in the individual business areas across the NRS Ministries

## Appendix 2: Gartner Research

Three Practices to Shift Business Expectations of IT Beyond 'Run the Business'; published: 4 January 2017; ID: G00319554; Analyst(s): Donna Scott, John MacDorman

The Built-to-Purpose IT Organization Refreshed 10 November 2017, Published 26 April 2016 - ID G00307927; Analyst: Colleen M. Young – Research VP

Three Essential First Steps for Leading Transformational Change Refreshed 24 September 2016, Published 3 March 2015 - ID G00269195; Analyst(s): Elise Olding, Carol Rozwell

**Any questions regarding this Report  
should be addressed to:**

Rand Guy  
Senior Managing Partner  
Gartner Canada Co.  
Telephone: +1 (587) 983-5483  
Email: rand.guy@gartner.com

**This Report was prepared for  
Ministry of Citizen's Services:**

Niki Sedmak  
Executive Director, Strategic Planning & Policy  
Ministry of Citizen's Services  
Telephone: +1 (250) 744-9193  
Email: Niki.Sedmak@gov.bc.ca

# Review of NRPP Outcomes to February 2018

---

## Introduction

The following responds to an inquiry for feedback regarding the validity of outcomes and achievements of the Natural Resource Permitting Project (NRPP) as asserted in a July 2017 report to the BC Government's Natural Resource Board (since renamed to the Deputy Ministers' Committee on Natural Resources (DMCNR)). The Report was prepared by BC Public Service staff, at the request of the Deputies of DMCNR, and based upon information provided by the Natural Resource Transformation Secretariat (NRTS), the body responsible for NRPP. In particular, this document replicates the sections on Benefits Realization and Summary of Accomplishments as found at slides 12-14 of the aforementioned "Phase1 – Report on Progress," (the "Report") (these constitute the first two columns in the tables below) and provides up-to-date comments on each of July 2017 status reports in the third, rightmost, column in the tables below.

It bears noting that this document has been created on short turnaround though the accumulated knowledge of a number of staff working directly on the sub-projects involved in the broader NRPP. A handful of these staff were briefly interviewed to confirm its contents. It should, therefore, be considered a fair, honest, and accurate representation of fact, though refinement of these representations would require further enquiry. At a high level, though, it provides a true snapshot of NRPP today – at the end of 4 years and \$78M of capital investment.

## Background

As mentioned in the Report, NRPP can be broken into three general components, each of which – along with an additional component, Core Transformation – is described in greater detail below: 1. Governance, 2. Business Transformation, and 3. Technology Foundation.

- *Governance* will not be specifically discussed in this document, though inferences may be drawn from commentary on other topics.
- *Business Transformation* refers to projects undertaken to enhance outcomes in business areas, via process enhancements enabled by technology.
- *Technology Foundation* refers to the Oracle stack of servers and middleware licensed via NRPP, along with a number of "Common Services": technology solutions for, e.g. document generation, document management, client management and smartforms, sitting on

top of the infrastructure. Collectively, these are referred to in the Report as the “technology platform” – representing the “Integrated Systems & Services Strategy” (ISSS) component of NRS Transformation referenced at slide 4 of the Report.

### *“Core Transformation”*

Not separately called out in the Report as one of the general components, NRPP also envisioned what it described as “Core Transformation”: making legislative and regulatory changes, integrating the NR ministries’ business and technical architecture, and creating an end-to-end operating model and workflow for authorizations passing amongst ministries as projects proceeded through their lifecycle. To report out on these topics:

- No legislative or regulatory change has been completed.
- No agreed-upon ministries-wide business or technical architecture has been established. (NRPP references the establishment of a “business architecture function” – this is represented by a director who bears the Business Architecture title.)
- Years of engagement amongst NR ministry staff has delivered significant work on a “sector operating model” and “authorization workflow,” but neither has been approved or implemented by senior leadership. Many would argue these elements of NRPP form the basis of its greatest value; however, they have been largely forgotten, apart from by those staff who have worked on them. They are implementable, but would take significantly more work and investment – especially if to be integrated into digital tools – in order to be deployed and adopted.

### *Business Transformation*

Apart from the ISSS technology transformation – originally envisioned by the CSNR IMB in 2012, before being combined into the broader Integrated Decision Making business case that then morphed again into NRPP – the bulk of the work that end users were to experience via NRPP was to come through the transformation – process enhancement, simplification, streamlining, integration, etc. – of business areas. Those business areas, as they appear on the NRPP dashboard used for reporting to NR ministry executive, are: Fish & Wildlife Data & Licensing Transformation (aka “Hunting”), Notice of Work Bundle (“NoW”), Crown Lands Transformation Implementation, Cutting Permits, Range, Archaeology, Resource Stewardship, Public Review & Comment Service, Process Automation, Crown Lands Re-Platforming, Occupant Licence to Cut, and Water Name Change. Today, despite what is reported on the above-mentioned executive dashboards, the only of those business transformation projects that will be completed to plan is Hunting, though with the asterisk that that “transformation” was conducted using an update to an existing legacy IMIT system, i.e. the “new” ISSS system was not used (as will be described later, it could not be used as it has not yet

been released into production). Further description could be made of the rest of these business transformation projects – along with an acknowledgement of the other such projects that have been dropped from the original NRPP list in the past four years – but the short version is that all have seen significant scope diminution (some to the point of negligibility, e.g. Archaeology) and, if they do deliver at all it will be to the extent of a minimum viable product.

### *Technology Foundation*

Described in brief above, “Foundation” (aka “the technology platform” aka ISSS) envisioned a modern, integrated system of tools, incorporating open, consolidated data, and a suite of “common services” that could be shared by business areas to cut costs, increase consistency and allow for the retrofitting or retirement of a vast number of the 400+ applications in use today across the NR ministries. The short version of how this has worked out is that (i) only one of those common services – the mapping service – has been released into Production – none of the rest have, despite \$46.7M investment in this technology; (ii) the envisioned Operating Spatial and Temporal Database was not able to deliver on temporality functionality, and, after over \$2M of investment, architects involved in the project suggest the work has taken data access and integration backwards in the NR ministries, rather than forwards; (iii) not a single new application is running on the new “platform;” (iv) the keystone application that has been envisioned to ultimately take the platform live – NoW – is over 2 years behind schedule and as of the writing of this document being rejected by internal users conducting testing, following their observation that it is both slower and more complicated than their pre-existing – already digital system (Virtual FrontcounterBC); and, (v) given the new platform is not yet available, not a single one of the 400+ sector applications have been shut down, meaning maintenance costs and complexity have gone up, rather than down.

Following is further commentary specific to the contents of slides 12-14 of the Report.



## Benefits Realization

| Commitment   | Status, as Reported to DMCNR, July 2017  | Comments, February 2018   |
|--|--|---|
| <b>Increased revenue to NRS &amp; broader government</b> | More online and digital application processes for authorization and the ability to pay online increases efficiencies in fee collection – revenue from license sales and hunting tags has increased and staffing costs have decreased | This may be true re: the Hunting tool, noting that the entire tool – including payment – was built on a legacy COTS system. No new online payment tool has been built and put into production as of today. Therefore, the broader goal cannot be reasonably said to have been met, in July or today.  |
|  | Easier access to information about investment opportunities  | NRS Online Services does provide a greater degree of information to project proponents. And, so, on a highly optimistic view, this could be described to increase information about investment opportunities.   |
|  | NRS Online Services fosters consistency for authorization processes  | Through the commitment's lens of increasing revenue, given NRSOS does not support modernized authorization processes – none of these have yet gone live – and simply acts as a website with links to pre-existing applications (though a website that is difficult to find via search), it cannot be fairly said that this website fosters consistency or supports increased revenue. |
|  | Industry costs are reduced - no longer have to employ regional specialists to navigate the   | Some industry representative remain bullish on the <i>vision</i> of NRPP; however, there has been no user   |

| Commitment   | Status, as Reported to DMCNR, July 2017   | Comments, February 2018  |
|--|---|--|
|  | system and work with government   | research or empirical evidence to suggest that today – especially as no new online applications (other than Hunting), integrated or otherwise, have been released to industry end users – costs have been reduced.   |
| <b>Increased access to NRS information</b>                                   | Public access to data and information from various disparate systems in one place for public use  | It is true that the Explore functionality of NRS Online Services – which <i>is</i> in production – has added spatial information not previously available to users, and does pull information from a variety of previously disparate sources.  |
|  | Citizens have more access and visibility into restrictions or previous authorized uses of the land – giving an applicant an indication of how this might impact a request prior to the formal process.                        | While true that the Explore tool makes more information of this kind available to users, it provides no support for how to interpret this information. In other words, while the tool may illuminate an encumbrance on the land base, for example, that illumination will not tell the users how this encumbrance might affect his or her application. |
|  | The technology platform provides increased access, efficiency and quality decisions in the process and signing of common program agreements for the sector, e.g. staff in different programs can access info in other systems | While it is true today that years ago a common program agreement was put in place, (i) this agreement has been recently identified as being faulty, and (ii) there has been no technology platform delivered that provides the purported increased “access, efficiency and quality decisions.”   |
| <b>Increased transparency &amp; certainty in the decision-making process</b> | Citizens can track applications through the life cycle of the application process.  | Not true. (Though project proponents can track their applications in Virtual FrontcounterBC, the tool the new technology platform was supposed to replace, but has not.)   |

| Commitment   | Status, as Reported to DMCNR, July 2017   | Comments, February 2018  |
|--|---|--|
|  | Easier access to information about investment opportunities.  | On a generous interpretation, it could be argued that Explore provides this easier access in such information.   |
| <b>Reduced process duplication</b>   | Increased consistency for authorization processes.  | Not true today. Might be arguable in respect of Notice of Work applications – though no authorization processes other than this one – if/when that tool goes into production. As a broad statement respecting authorization processes across the NR ministries, however, this statement would not be supportable for years to come via NRPP tools. |
| <b>Improved management and efficiency of NR activities, including cumulative effects</b> | Faster decisions: automated decision-making process allows multiple decision-makers participating in the same process to review and make determinations concurrently  | Not available today. In one instance, could be argued if/when NoW goes live, though “automated” might be challenged.   |
|  | The technology platform allows for better rebalancing of workload throughout the province because info is online rather than paper-based.   | Not true as the platform is not yet in use. And, if/when it goes live, it will do so only in support of a single application process: NoW. In respect of that process, the statement would be true.  |
|  | A common set of resource values is available for statutory decision makers to inform their decisions. The system will allow all decision makers access to the same set of agreed to cumulative effect value sets. | The value sets are available, but not connected to an authorization process or a digital tool.   |

| Commitment   | Status, as Reported to DMCNR, July 2017  | Comments, February 2018  |
|--|--|--|
|  | Public Review and Comment service will provide a single access, real-time authentication for the sector (this used to be paper based and distributed).   | No tool was available in July 2017, nor is one today. However, by end of March 2018, an MVP product will into production for testing on a single business area and region. Therefore, the NRPP vision of a sector-wide tool, one that provides a lifecycle view of project consultations, one supported by legislative/policy change, and enabled by a new means of authentication, will not be met. |
| <b>Enhanced relationships and social licence with industry, First Nations and citizens</b> | Improving industry relationships through enhanced consistency, increased access and streamlined process and enhanced technical capabilities (paying online, one client Id, digital document submissions).        | None of these capabilities were available in July, nor are today. Very few industry representatives have seen demonstrations – to say nothing of user research – in respect of NRPP’s tools. Best information suggests no First Nations are aware of NRPP’s current status. Therefore, assertions of enhanced relationships and social licence are baseless.   |
|  | Improving relationships with First Nations by making the consultation process less intensive and time consuming through activity based applications and consultations instead of authorization by authorization. | See previous note. First Nations-related projects and engagement were specifically carved out of NRPP’s scope. No improvement to consultation has come via NRPP (or otherwise, via other in-flight IMIT projects, which also have not delivered into production).  |
| <b>Integrated technology foundation that will support all future NRS business</b>          | The technology platform promotes integration because it is a single point of access to relevant systems that support statutory decisions on land usage (permits, renewals, tenures, authorizations).             | Perhaps in the future. No technology platform is live today, nor have systems been integrated. The NR sector today maintains more applications that it did at NRPP’s inception.  |

| Commitment | Status, as Reported to DMCNR, July 2017                                  | Comments, February 2018  |
|------------|--|--|
|            | The platform replaces aging and unsustainable legacy systems.            | Untrue. See above.   |
|            | The platform is based on a modern, stable and integrated infrastructure. | Some might argue the validity of these adjectives, others would not. |

## Summary of Accomplishments

| Item                      | Description   | Comments, February 2018  |
|---------------------------|---|--|
| <b>NRS Online Service</b> | Single access point to access NRS services  | Services may be accessed through NRSOS; however, the only service that exists on/via NRSOS, rather than simply linkable to a pre-existing online service, is the Explore functionality. In other words, NRSOS today is an online clearinghouse / roadmap / veneer. |
|                           | Expanded ability for clients to pay for permits, authorizations and licences online | Other than in respect of hunting licences online, this accomplishment is today unrealized.   |
|                           | Ability to upload documents electronically (previously paper submissions)           | NRPP has licensed a document upload tool from Oracle. However, this tool is not in use – has not been released into production – as of today.  |

|  |   |   |
|--|---|---|
| <b>Explore<br/>(Pre-Application) through NRS Online Services</b> | Explore function makes it easier for clients to explore for land-based opportunities with access the latest land information in one location  | True.   |
|  | Includes a new mapping tool and electronic land activity reports that provide application guidance information to clients interested in performing activities on the land base. Steady increase in visitors since launch (average 10,000/month) | While it is true that the mapping tool – “Common Web Mapping (CWM)” is new to government, and that it will generate reports, independent comparisons to previously-available-to-government mapping tools (e.g. ESRI) and other online tools result in those alternative tools demonstrating greater functionality than CWM. |
| <b>Hunting</b>   | Faster and more efficient process for hunters - an estimated 175,000 online applications expected for the season – saving more than 180,000 pieces of paper and weeks of time for the applicant.  | True  |
|  | Improved enforcement and wildlife management - conservation officers will now be able to access real-time data in the field through smartphone technology, reducing the risk of non-compliance and abuse of B.C.’s wildlife.                    | True, with the note, as per above, that this built on a legacy COTS system (POSSE), rather than the ISSS platform.  |
| <b>NRS Authorization Operating Model</b>                         | New NRS Authorization Operating Model has been created to provide a more efficient and consistent authorization process for clients.  | As noted above, significant work and engagement has gone into the development of an NRS Authorization Operating Model. However, that model – and associated authorization workflow and land statusing tools – have been neither endorsed nor implemented.   |

|                           |   |  |
|---------------------------|---|--|
| <b>Client ID tool</b>     | Clients have one unique identifier for using NRS Online Services.   | This is a reference to the Client Management System (CMS). This statement will be true when CMS is in production, which is anticipated to be April 2018.         |
| <b>Change Management</b>  | 1400+ staff from across the province engaged in events and workshops to create awareness, harness expertise and gather feedback about NRPP.                               | At a cost of \$7.09M and in the context of the single application that has gone into production via NRPP over the course of its 4 years, this statement is true. |
| <b>Cumulative Effects</b> | Five Cumulative Effects Values Sets have been developed to support decision makers in their evaluations of the cumulative effects of multiple activities on the land base | True. Noting that these values are available, but not integrated into an online tool as originally envisioned.   |



TB Major Meeting Date: January 17, 2019  
377587

Confidential

Honourable Doug Donaldson  
Ministry of Forests, Lands, Natural Resource Operations and Rural Development  
Room 248 Parliament Buildings  
Victoria BC V8V 1X4

Dear Colleague:

Re: Natural Resource Permitting Project Update and Funding Request

I am writing to inform that Treasury Board has reviewed your update and funding request for the Natural Resources Permitting Project (NRPP).

Treasury Board has approved the following:

s.12



Sincerely,



Carole James  
Chair

cc: John Allan  
Deputy Minister  
Ministry of Forests, Lands, Natural Resource Operations, and Rural Development

Jill Kot  
Deputy Minister  
Ministry of Citizens' Services

Dave Nikolejsin  
Deputy Minister  
Ministry of Energy, Mines, and Petroleum Resources

Wes Shoemaker  
Deputy Minister  
Ministry of Agriculture

Mark Zacharias  
Deputy Minister  
Ministry of Environment and Climate Change Strategy

CJ Ritchie  
Associate Deputy Minister and Government Chief Information Officer  
Ministry of Citizens' Services

Trish Dohan  
Assistant Deputy Minister and Executive Financial Officer  
Ministry of Forests, Lands, Natural Resource Operations, and Rural Development

Denise Rossander  
A/Assistant Deputy Minister and Ministry Chief Information Officer  
Ministry of Forests, Lands, Natural Resource Operations, and Rural Development

## **Overview: Natural Resource Permitting Project Review**

### **CONFIDENTIAL**

s.12

Page 029 of 278 to/à Page 030 of 278

Withheld pursuant to/removed as

s.12



## Treasury Board Submission – Request for Decision

**Minister:** Honourable Anne Kang, Minister of Citizens' Services

**Ministry:** Citizens' Services

**Date:** January 24, 2020 Ministry Document #: 2020-021

**Title:** NRPP Lessons Learned and Action Plan

s.12

Page 032 of 278 to/à Page 042 of 278

Withheld pursuant to/removed as

s.12; s.13

Page 043 of 278

Withheld pursuant to/removed as

s.12



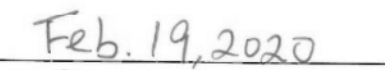
s.12



Contact: Jill Kot, Deputy Minister,  
Ministry of Citizens' Services  
(250) 387-8852

  
Honourable Anne Kang

(Option 1)

  
Date Signed

Page 045 of 278 to/à Page 048 of 278

Withheld pursuant to/removed as

s.12



Page 049 of 278

Withheld pursuant to/removed as

s.12; s.13

Page 050 of 278

Withheld pursuant to/removed as

s.12; s.13; s.22

Page 051 of 278 to/à Page 053 of 278

Withheld pursuant to/removed as

s.12

## **Business and Economic Implications Questionnaire (Step 1)**

**Name of Initiative:** NRPP Action Plan

**Document Number:**

**Name of Ministry:** Citizens' Services

s.12

## Business and Economic Implications Questionnaire (Step 1)

s.12

| Submission Information              |                              |
|-------------------------------------|------------------------------|
| Ministry Contact                    | Name: Hayden Lansdell        |
|                                     | Number/Email: (250) 415-0118 |
| Date Submitted (DD-MM-YYYY):        | 21-01-2020                   |
| Cabinet Committee Date(DD-MM-YYYY): |                              |

If you have any questions or require support to complete this form please contact the Business and Economic Implications Framework Team at: [BEIF@gov.bc.ca](mailto:BEIF@gov.bc.ca)

# NRPP lessons learned Review 2019

---



# Technology Review Report 2019

November  
2019



|                   |    |
|-------------------|----|
| Executive summary | 02 |
| <hr/>             |    |
| Introduction      | 06 |
| <hr/>             |    |
| Background        | 09 |
| <hr/>             |    |
| Observations      | 13 |
| <hr/>             |    |
| Recommendations   | 26 |
| <hr/>             |    |

Page 058 of 278 to/à Page 101 of 278

Withheld pursuant to/removed as

s.12





Page 103 of 278 to/à Page 114 of 278

Withheld pursuant to/removed as

s.12

# NRPP Lessons Learned Review – Forward Action Plan

January 2020

## Confidential



Ministry of  
Citizens' Services

Page 116 of 278 to/à Page 118 of 278

Withheld pursuant to/removed as

s.12

Page 119 of 278 to/à Page 124 of 278

Withheld pursuant to/removed as

s.12; s.13

Page 125 of 278 to/à Page 126 of 278

Withheld pursuant to/removed as

s.12

Page 127 of 278

Withheld pursuant to/removed as

s.13; s.12

Page 128 of 278 to/à Page 129 of 278

Withheld pursuant to/removed as

s.12



Page 130 of 278

Withheld pursuant to/removed as

s.12; s.13

# NRPP review: conclusions

Andrew Greenway

@ad\_greenway

Partner, Public Digital

- 1. Observations and recommendations**
2. Briefing and comms
3. Next steps

# Observations

Page 134 of 278 to/à Page 137 of 278

Withheld pursuant to/removed as

s.12

# Recommendations

Page 139 of 278 to/à Page 148 of 278

Withheld pursuant to/removed as

s.12

# Reflections on recommendations

## Briefing and communications

### Next steps





## Treasury Board Submission – Request for Decision

**Minister:** Honourable Anne Kang, Minister of Citizens' Services

**Ministry:** Citizens' Services

**Date:** [January 24, 2020] Ministry Document #: [X]

**Title:** NRPP Lessons Learned and Action Plan

s.12

Page 151 of 278 to/à Page 161 of 278

Withheld pursuant to/removed as

s.12; s.13

Page 162 of 278

Withheld pursuant to/removed as

s.12



s.12



Contact: Jill Kot, Deputy Minister,  
Ministry of Citizens' Services

(250) 387-8852

Honourable First Name Last Name

Date Signed

Page 164 of 278 to/à Page 167 of 278

Withheld pursuant to/removed as

s.12

Page 168 of 278

Withheld pursuant to/removed as

s.12; s.13

Page 169 of 278

Withheld pursuant to/removed as

s.12; s.13; s.22

Page 170 of 278 to/à Page 172 of 278

Withheld pursuant to/removed as

s.12



Page 173 of 278 to/à Page 187 of 278

Withheld pursuant to/removed as

s.12; s.13

Page 188 of 278

Withheld pursuant to/removed as

s.13; s.12

Page 189 of 278 to/à Page 197 of 278

Withheld pursuant to/removed as

s.12; s.13

Page 198 of 278

Withheld pursuant to/removed as

s.13; s.12

Page 199 of 278 to/à Page 220 of 278

Withheld pursuant to/removed as

s.12; s.13



Natural Resources Permitting Project  
Project Close Out Report  
June 2019

Information, Innovation & Technology Division  
Submitted to: NRPP Project Board

Confidential – Not for Distribution



## Contents

|  |    |
|--|----|
| 1.0 Purpose of the Report .....                                | 4  |
| 2.0 Summary .....  | 4  |
| 3.0 NRPP Vision & Background .....                             | 5  |
| Context & Business Objective .....                             | 5  |
| Gartner Review & Recommendations .....                         | 6  |
| NRPP Close Out.....  | 7  |
| Companion Documents to this Report .....                       | 7  |
| 4.0 Outcomes.....  | 8  |
| Figure 1 – Timeline of NRPP Deliverables.....                  | 8  |
| Common Services .....  | 9  |
| Program-Specific Services.....                                 | 10 |
| NRPP Financials .....  | 11 |
| Table 1 – Summary of Financials .....                          | 11 |
| 5.0 Summary of NRPP Benefits Realized .....                    | 12 |
| 6.0 Lessons Learned & Transition.....                          | 12 |
| Lessons Learned, Recommendations and Proposed Approach .....   | 12 |
| Table 2 – IIT's Plan to Address Lessons Learned from NRPP..... | 12 |
| Transition to Operations.....                                  | 18 |
| Table 3 – Summary of Staffing Shifts from NRPP .....           | 20 |
| Funding the Transformation & Innovation Mandate .....          | 20 |
| Figure 2 – Summary of IIT Shifts.....                          | 20 |
| Expected Benefits to NRMs .....                                | 21 |
| 7.0 Conclusion and Next Steps.....                             | 21 |
| 8.0 Appendices.....  | 22 |
| Appendix A – Status of Deliverables Against Commitments.....   | 23 |
| Figure 3 –NRPP Workstreams.....                                | 23 |
| Table 4 – Status of Business Transformation Activities .....   | 24 |
| Table 5 – Status of Technology Foundation Activities.....      | 27 |
| Table 6 – Status of Governance Activities .....                | 30 |

|   |    |
|---|----|
| Appendix B - Projects Terminated or Paused Before Completion.....                                   | 33 |
| Table 7 – Projects Terminated or Paused Before Completion .....                                     | 33 |
| Appendix C – Independent Reviews and Reports .....  | 35 |
| Table 8 – First and Second Reports: PwC's Assessment of NRPP's Response to PwC Recommendations..... | 36 |
| Table 9 – Third Report: Response and Status of KPMG's Health Check .....                            | 38 |
| Appendix D – Alignment to Best Practice in IT Investments .....                                     | 47 |
| Table 10 – Alignment to Best Practices in IT Investments .....                                      | 47 |
| Appendix E – Summary of NRPP Benefits Realized .....  | 53 |
| Table 11 – NRPP Commitments and Benefits Realized .....   | 53 |

CONFIDENTIAL



## 1.0 Purpose of the Report

The purpose of this report is twofold:

1. To document the deliverables of the Natural Resources Permitting Project (NRPP) from inception in FY14/15 to closure in FY18/19.
2. To document lessons learned and make recommendations for improvement on future projects.

All requirements directed by Treasury Board over the course of NRPP have been met except for a final report back due to the Chair of Treasury Board by November 30, 2019. This report is to include detailed information about:

- Business areas successfully onboarded;
- New component(s) funded through government's Minor IMIT Capital envelope, that build(s) on existing NRPP infrastructure;
- The total number of users for each completed component; and
- Detailed cost implications.

## 2.0 Summary

NRPP was launched in 2014 to transform the way the natural resource ministries (NRMs) and associated agencies made decisions for resource use and management on B.C.'s land base. The Natural Resource Transformation Secretariat (NRTS), led by an assistant deputy minister, was established to deliver on the following transformation goals:

1. Improve the timeliness and quality of the customer experience;
2. Increase the durability of decisions through transparency and involvement of First Nations and businesses;
3. Better understand the cumulative impact of policies and multiple decisions across the land base; and
4. Support decision-makers to appropriately balance social, economic and environmental objectives.

It was determined that the most effective approach to transformation was to establish an integrated portfolio of projects, each of which would be tracked separately and contribute toward aligning processes, people, technology and legislation.

As NRPP progressed, several independent reviews were commissioned. In March 2018, Gartner recommended that NRPP be closed out. It was determined that though NRPP delivered value, the NRPP vision had not yet been fully realized due to issues of governance, scope, technology stewardship and organizational performance. In June of that same year, the

Deputy Ministers' Committee on Natural Resources (DMCNR) announced it would close out NRPP and merge its responsibilities with the newly-established Information, Innovation and Technology Division (IIT).

Despite its challenges, NRPP created online resources, services and tools that improved and streamlined B.C.'s natural resource permitting processes and information and technology services.

A key legacy of NRPP's work is the Common Services that were created to aid in future project development in the NRM. The benefit to the NRM is that instead of redeveloping the same capability in multiple lines of business systems, these Common Services are already in place and ready to be used.

IIT learned from the NRPP experience; the projects initiated by NRPP were repositioned for success with the same objectives yet a different approach.

### **3.0 NRPP Vision & Background**

#### *Context & Business Objective*

The economic impact of the natural resource sector in B.C. is significant: it accounts for 153,000 jobs<sup>1</sup> and \$2.5 billion in direct annual revenue to the province.<sup>2</sup> However, opportunities for increased economic growth and job creation have been hampered by outdated, inefficient and sometimes duplicative approaches to authorizing and administering the use of BC's natural resources. Services have historically been fragmented and often challenging to access. The overall result of these approaches has been a diminishing ability to make timely, accurate durable decisions about the land base, and the commensurate risk to government of legal action, compensation liabilities and damage to the environment. NRPP was launched to transform the way the NR ministries and associated agencies make decisions for

---

<sup>1</sup> Statistics Canada, Labour Force Survey. Prepared by BCStats in February 2013.

<sup>2</sup> Budget and Fiscal Plan 2013/14 – 2015/16, February 19, 2013.

resource use and management on BC's land base by integrating operations and policies and modernizing business processes and service delivery.

### ***Gartner Review & Recommendations***

In January 2018, Gartner was engaged to conduct a high-level assessment of both NRPP/ NRTS and the IMIT services provided by the Information Management Branch (IMB). In their March 2018 report<sup>3</sup>, Gartner recommended the following:

1. A new role of ADM-level NR Sector CIO role with full responsibility and accountability for all NRM IMIT staff, services and projects;
2. A Transition Plan to provide for the expedient close-out of NRPP/NRTS – ensuring the smooth transition of people, capital/operating funding dollars and existing or ongoing projects to IMIT as soon as is reasonably possible (within the next 3-6 months); and
3. That DMCNR discuss a refreshed approach and organizational mandate for “transformation” across the NRMs. This discussion should also include a review of options for where to assign the transformation portfolio in the NRMs’ organizational structure.

In June 2018, in keeping with Gartner's recommendations, leading industry practices and consultation with the NRM deputy ministers and the Office of the CIO, DMCNR established the new IIT division, led by an assistant deputy minister (ADM)-level CIO, and charged with leading the modernization and transformation of business practices for the NRMs.

Aligned to Gartner's second recommendation, DMCNR decided to close out NRPP and merge its responsibilities into the new IIT. It was determined that though NRPP delivered value through the creation of business/ public/ First Nations-focused digital services and the development of re-usable common services, the NRPP vision had not yet been fully realized due to issues of governance, scope, technology stewardship and organizational performance. These themes are explored more fully in the Lessons Learned section of this report.

---

<sup>3</sup> Gartner. NRPP – NRS IMIT Assessment Report. March 2018.

### *NRPP Close Out*

Despite its accomplishments, numerous issues were identified with the approach taken to deliver NRPP. IIT learned from this experience and the projects initiated by NRPP were repositioned for success with the same objectives yet a different approach.

The NRPP projects completed in 2018/19<sup>4</sup> were selected based on three criteria:

- Focus on citizen and client benefits;
- Business area readiness; and
- Project/ technology approach.

Other projects in the NRPP were paused, for a variety of reasons. These projects are described in Appendix B.

### *Companion Documents to this Report*

Readers interested in additional information about NRPP may wish to refer to the following documents, which are available through IIT:

- **Context for NRPP:** *Natural Resources Permitting Project Phase 1 – Report on Progress* submitted to the Natural Resources Board in July 2017. Various reporting documents; the project team provided monthly reporting to the Project Board since project inception, quarterly reporting to the OCIO Capital Investment Board since 2017, and annual reporting to Treasury Board Staff.
- **Independent Project Reviews:** As recommended by the OCIO and in keeping with best practice for large public sector projects, the project team commissioned several independent reviews of NRPP.<sup>5</sup> A final independent review was commissioned in March 2019 and conducted by MNP.

---

<sup>4</sup> See Appendix A for more information about projects selected for completion.

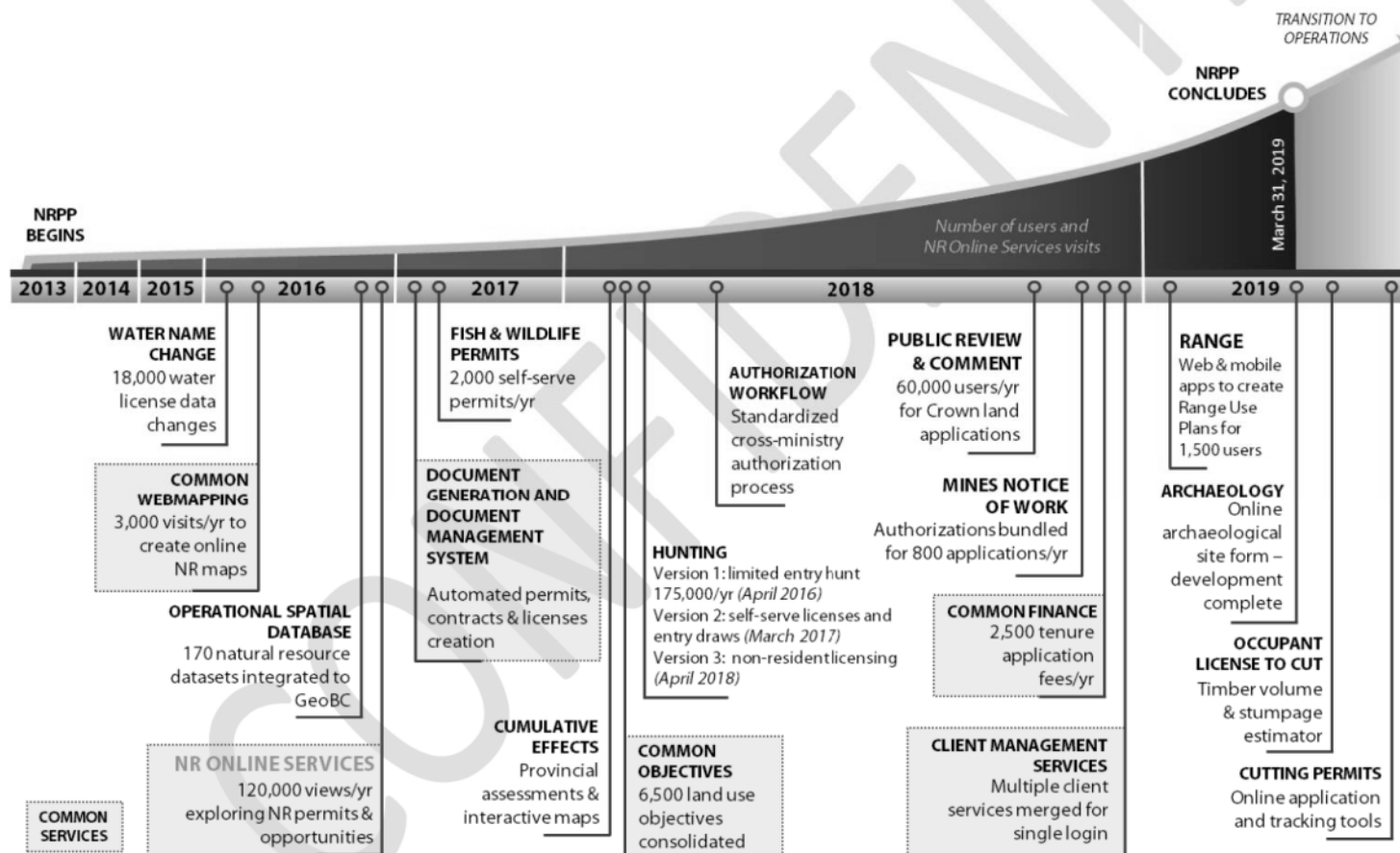
<sup>5</sup> See Appendix C for information about report findings and Appendix D for alignment to recommendations in the Office of the Auditor General's report *Getting IT Right*.

- **Review of Project Finances:** A financial review of NRPP capital projects is underway with a targeted completion date of June 14, 2019.

## 4.0 Outcomes

Between 2013-2019, NRPP created online resources, services and tools that improved and streamlined B.C.'s natural resource permitting processes and information and technology services.

**Figure 1 – Timeline of NRPP Deliverables**



### **Common Services**

A key legacy of NRPP's work is the Common Services that were created to aid in future project development in the NRM. The benefit to the NRM is that instead of redeveloping the same capability in multiple lines of business systems, these Common Services are already in place and ready to be used. The use of the Common Services is expected to reduce development costs by almost \$20 million<sup>6</sup> over the next five years and deliver higher client satisfaction from a more consistent user experience. Furthermore, Common Services supports integrated decision making across the NRM, encourages cross-NRM integration to support client centric design and reduces the complexity and cost of operational support.

- *NR Online Services Portal* – Allows the public to pursue an activity online by simultaneously applying for a bundle of natural resource permits, licenses and authorizations, and allows provincial staff to review and approve.
- *Common Messaging Service* – Used to electronically notify a user about an event, such as when further information is required from a proponent on an authorization. This service tracks delivery status information and notifies applications so they can respond to a failed delivery with an automated retry.
- *Client Management Service* – Allows clients to have an account for centralized access to their submitted applications and other government services through the NR Online Services portal.
- *Common Finance Service* – Enables a common platform for the online collection of application fees using a credit card, cheque or in-person payment at any FrontCounter BC office.
- *Common Web Mapping Service* – Enables clients to use digital map-based query functions to better understand and explore natural resource use and development opportunities.
- *Document Management Service* – Allows clients to manage (store and retrieve) important documents
- *Document Generation Services* – Enables clients to create documents based on an uploaded template
- *Explore Interactive Application* – An online interactive, map-based application that allows clients to identify and explore natural resource investment opportunities on the land base.

---

<sup>6</sup> See Appendix A in the companion document "IIT Business Case" for more detailed information quantifying this benefit to government of foundational Common Services.

### *Program-Specific Services*

Several program-based services were launched over the course of NRPP including:

- *Hunting* - Faster and more efficient process for hunters. More than 110,000 active hunters are eligible to apply for the new digital Limited Entry Hunt draw with an estimated 175,000 online applications expected for the season – saving more than 180,000 pieces of paper and weeks of time for the applicant. Improved enforcement and wildlife management. Conservation officers will now be able to access real-time data in the field through smartphone technology, reducing the risk of non-compliance and abuse of B.C.'s wildlife.
- *Applications, Comments and Reasons for Decision (also known as Public Review and Comment)* - A single, authoritative and up-to-date access point for information on applications and decisions relating to Crown Lands tenure authorizations, including the ability to provide comments on pending applications.
- *Range* - A mobile and desktop application to enable ministry Range staff and ranchers to submit and amend electronic Range Use Plans, replacing the existing paper-based process for all 1,505 range tenure holders in B.C.
- *Archaeology* - More accurate and accessible archaeological site records through a series of smart forms to enable the electronic submission of Archaeology site data. This replaces a paper-based process and addresses a backlog of many years of outstanding paper submissions.
- *Cutting Permits* - A new system to integrate across the 23 resource districts, and to eliminate manual process steps, in the Cutting Permit application and administration processes. Over 2,000 cutting permit applications are received by the Province each year. Users will submit and manage Cutting Permits applications online through a more efficient and consistent process. Staff will be able to:
  - Manage, amend and cancel Cutting Permits online through the staff portal
  - Confirm conflicts on the land base using a new status and clearance tool
  - Manage Roads Permit applications using a new Resource Roads System
  - Benefit from performance enhancements to the Forest Tenures Administration system
- *NRM Authorization Workflow Model* - To assist in standardizing how permit applications are submitted and reviewed, the NRM Authorization Workflow Model was created. The Authorization Workflow has been used to prepare Forestry and Crown Lands business areas prior to automating application processes. A consistent approach across regions and business units provides a more efficient authorization process for clients, simplifies staff training and allows load balancing during seasonal busy times.
- *Cumulative Effects* - Five Cumulative Effects Values Sets have been developed to support decision makers in their evaluations of the cumulative effects of multiple activities on the land base.

Together, these accomplishments represent incremental improvement towards a more effective, integrated sector:

- Processes are more harmonized;
- Information is more readily available to proponents, the public and staff;
- Workload is decreasing for proponents; and
- Previously paper-based processes are moving to a digital environment, freeing up staff to do more value-added work.

The result is an increasingly evidence-based and comprehensive approach to considering the full impact of decisions across the land base.

#### NRPP Financials

**Table 1 – Summary of Financials**

| Summary of Direct Investment for the Natural Resources Permitting Project |                                      |           |            |            |            |            |            |            |
|---|--------------------------------------|-----------|------------|------------|------------|------------|------------|------------|
|   |                                      | 2013/2014 | 2014/2015  | 2015/2016  | 2016/2017  | 2017/2018  | 2018/2019  | Totals     |
| Operating   | Salaries and Benefits <sup>1</sup>   |           | 1,381,008  | 2,454,388  | 2,685,885  | 3,477,007  | 4,909,827  | 14,908,115 |
|   | Operating Costs <sup>2 &amp; 3</sup> |           | 1,379,299  | 2,720,523  | 5,549,258  | 5,591,008  | 5,691,281  | 20,931,369 |
|   | NRPP Amortization <sup>2</sup>       |           |            | 934,438    | 937,214    | 5,448,076  | 8,474,808  | 15,794,535 |
| Capital   | NRPP Capital <sup>4</sup>            | 4,297,294 | 19,040,480 | 20,763,646 | 20,651,237 | 18,894,451 | 10,439,409 | 94,086,516 |

Notes:

1. Does not include salaries and contracts that were capitalized
2. \$896,326.20 reported above in Amortization resides in Operating Costs (STOB 63) in CAS.
3. \$22M write-off is not included in the Operating Costs of FY18/19
4. Includes: OCIO Capital for Hunting Rel 1, Pre-NRPP Integrated Strategy Capital, capitalized salaries and contracts.



## 5.0 Summary of NRPP Benefits Realized

NRPP funding approval was tied to a set of general benefits such as reduced duplication, greater transparency and certainty in decision making. These benefits did not have specific metrics attached when they were originally developed, and subsequent attempts to provide quantitative measures were largely unsuccessful. Appendix E outlines the commitments made to Treasury Board and the associated (predominantly qualitative) statements of benefits realized.

## 6.0 Lessons Learned & Transition

### *Lessons Learned, Recommendations and Proposed Approach*

**Table 2 – IIT's Plan to Address Lessons Learned from NRPP**

| Issue Identified   | Solution  | IIT's Plan to Deliver   |
|--|---|---|
| <b>GOVERNANCE</b>  |   |   |
| Duplication and overlap of effort and responsibilities           | <ul style="list-style-type: none"><li>• Streamline and unify governance across NRM so that it is not conflicting</li><li>• Integrate into OCIO governance – one corporate model</li><li>• Separate strategic direction decisions from individual projects</li></ul>   | <ul style="list-style-type: none"><li>• IIT was established as a division to eliminate overlap, duplication and competing priorities between NRTS and IMIT</li><li>• Portfolio approach with roadmaps will help surface duplication so it can be addressed</li><li>• A growing catalogue of common services is a tangible example of duplication being eliminated</li></ul> |
| Highly complex, duplicative, process-driven governance structure | <ul style="list-style-type: none"><li>• A single authority, ADM-level CIO for IMIT (Gartner recommendation) has been created in new IIT Division responsible for all technology across NRM</li><li>• Implemented Gartner recommendation - "Shift from a project-aligned to service delivery structure to organize, operate,</li></ul> | <ul style="list-style-type: none"><li>• IIT is shifting away from the project governance structure that was in place for NRPP, which ran in parallel to existing Ministry governance, toward integrating into the operational governance for the NRMs</li><li>• A refreshed approach to the Investment Board will ensure a renewed focus on and</li></ul>                   |

| Issue Identified  | Solution  | IIT's Plan to Deliver  |
|---|---|--|
| Separate governance structure for NRPP that is different than the overall management of the NRM, led to siloed priority setting | and continuously evolve IT services to satisfy customer needs."   | integrated view of priority setting and investment recommendations across the NRMs   |
|   | <ul style="list-style-type: none"> <li>• Priority setting done across the NRM</li> <li>• Priorities set through governance body with continuous assessment taking place</li> <li>• Use funding envelop that allows flexibility within boundaries to change to urgent/new priorities</li> <li>• Funding approach ensures money is spent when needed, not out of fear there won't be more if not spent; this is partially fixed by working on smaller, more iterative projects</li> </ul> | <ul style="list-style-type: none"> <li>• IIT's operating model is shifting away from its dependence on capital projects</li> <li>• Increased use of in-house resources will lead to more flexibility to respond to shifting NRM priorities and deploy blended project teams targeting priority projects with specific skills</li> <li>• Projects will be broken up into smaller components to deliver business value more quickly (usable products in smaller iterations), which will also make funding within the boundaries of a fiscal year more straightforward</li> </ul> |
| <b>SCOPE</b>  |   |  |
| IT led the transformation before business practices had been completed  | <ul style="list-style-type: none"> <li>• Transformation starts with changing/modernizing the business processes first and then changing the IT</li> </ul>   | <ul style="list-style-type: none"> <li>• IIT will create product portfolio roadmaps with a shared business-driven vision</li> <li>• In-house business analysts will support program areas to better understand business challenges and opportunities and make necessary changes prior to initiating technology-focused projects</li> <li>• Business relationship managers will enable IIT to be proactive in identifying business transformation opportunities</li> </ul>  |

| Issue Identified  | Solution   | IIT's Plan to Deliver  |
|---|--|--|
|   |  | <ul style="list-style-type: none"> <li>• One of the IIT Principles is that business readiness is a pre-requisite to undertaking an IMIT project – business transformation precedes automation</li> <li>• Dedicated change management function will help ensure business areas are well prepared and supported throughout changes to their business processes</li> </ul>  |
| Procurement contracts were signed with a large, complicated consortium that has responsibilities for major transformation | <ul style="list-style-type: none"> <li>• Integrate a variety of vendors, including small and local</li> <li>• Use simplified contracts with specified outcomes</li> <li>• Simplify procurement vehicles i.e. Sprint with Us, Code with Us, resource augmentation to support blended teams</li> </ul> | <ul style="list-style-type: none"> <li>• A consolidated contract unit is being formed within IIT to:               <ul style="list-style-type: none"> <li>◦ develop and implement sourcing approaches aligned to government's Procurement Modernization Strategy and</li> <li>◦ improve vendor management</li> </ul> </li> </ul>   |
| User experience design started too late in the process, causing delays and added costs                                    | <ul style="list-style-type: none"> <li>• Focus on the client and citizen service delivery</li> <li>• Embed user experience design from the very beginning of the project</li> </ul>  | <ul style="list-style-type: none"> <li>• In-house user design expertise is being developed within the IIT team to support both projects and continuous improvement</li> <li>• User design experts will be an integral part of the core team from the outset rather than a consideration introduced mid way through the project</li> <li>• User design will be part of portfolio planning to ensure the needs of the user are always considered (user profiles)</li> <li>• Client needs are included in the relationship managers' understanding of business needs</li> </ul> |

| Issue Identified   | Solution  | IIT's Plan to Deliver  |
|--|---|--|
| <b>TECHNOLOGY STEWARDSHIP</b>  |   |  |
| Technology was overbuilt and proprietary and focussed on one size fits all | <ul style="list-style-type: none"> <li>• New approach to open source by default, cloud-ready, principle-focused and strategically-aligned roadmap</li> <li>• Focus on sustainable and scalable technology</li> <li>• Build technology once, use often for common services</li> </ul>          | <ul style="list-style-type: none"> <li>• IIT committed to these solutions – open source by default, cloud-ready, principle-focused and aligned to a strategic roadmap – by embedding them in the IMIT principles.</li> <li>• This ensures they are followed through the governance chain to the NRM IMIT Investment Board (IB)</li> <li>• Component-based common services allow business areas to choose the particular components specific to their business needs</li> <li>• DMCNR has directed that common services be the default solution unless a business drives an exception and approval is explicitly granted by the IB to deviate from the common service offering</li> </ul> |
| The world of technology is rapidly changing                                | <ul style="list-style-type: none"> <li>• Keep clear business focus and evolve the technology to support it, not lead it</li> <li>• Harvest new technology options that support the focus on business</li> <li>• Use of Open Source to increase agility and avoid licensing lock-in</li> </ul> | <ul style="list-style-type: none"> <li>• Rather than commit to large, potentially rigid proprietary IMIT solutions, IIT is shifting to a partnership model between program areas and IIT premised on continuous improvement in an agile, iterative and flexible environment</li> <li>• IIT works closely with the OCIO and participates actively on cross-government committees to ensure alignment to corporate direction and incorporation of NRM needs and perspectives in cross-government planning</li> </ul>   |

| Issue Identified                                       | Solution   | IIT's Plan to Deliver   |
|--|--|---|
|  |  | <ul style="list-style-type: none"> <li>• IIT is also committed to staying abreast of leading practices and emerging technology solutions</li> <li>• Open source has been embedded in IIT principles, a data migration strategy is being developed to reflect the shift to purchasing software as a service rather than relying on proprietary systems</li> <li>• IIT is a frequent partner on pilot projects with the OCIO</li> <li>• The enterprise architecture function within IIT has been restructured to ensure a focus on business capabilities and data architecture</li> </ul> |
| Importance of building a foundation of common services | <ul style="list-style-type: none"> <li>• Create an easy-integration framework to reduce costs and development time for NRM</li> <li>• Build a foundation that is technically stable so that business and developers can focus on agility</li> </ul>                                | <ul style="list-style-type: none"> <li>• The IIT team is stabilizing the technical foundation and freeing up dedicated agile teams to evolve the common services and work to onboard new programs</li> <li>• DMCNR has mandated the use of common services except where the IB approves an exception driven by business needs</li> </ul>  |
| <b>ORGANIZATIONAL PERFORMANCE</b>                      |  |   |
| Too many key roles and controls were outsourced        | <ul style="list-style-type: none"> <li>• Use in-house project management and independent project management which is separate from vendor development</li> <li>• Creation of new IIT Division with clear roles, responsibilities and accountabilities for all positions</li> </ul> | <ul style="list-style-type: none"> <li>• IIT is actively and purposefully rebuilding in-house capability and capacity in project management, business analysis, user design, scrum/agile, software development and change management to create a critical mass of flexible project resources to be</li> </ul>   |

| Issue Identified  | Solution   | IIT's Plan to Deliver  |
|---|--|--|
|   | <ul style="list-style-type: none"> <li>IIT Division leads the initiatives and vendors play supportive role</li> </ul>  | <p>deployed according to shifting and emerging NRM priorities</p> <ul style="list-style-type: none"> <li>Talent and knowledge is retained within government</li> </ul>   |
| Workforce issues with critical skills development and lack of retention of in-house knowledge | <ul style="list-style-type: none"> <li>Use of blended teams made up of staff and vendors to ensure knowledge and skills transfer to in-house staff</li> <li>Build in-house skill in code development to be able to do the work internally and/or provide quality assurance of the work</li> <li>Grow our talent internally for consistency and stability rather than being overly reliant on vendor expertise</li> </ul> | <ul style="list-style-type: none"> <li>Capacity is supplemented when required but capabilities and core strength are within government</li> </ul>  |
| Large waterfall IT projects are not flexible enough to adapt to changes                       | <ul style="list-style-type: none"> <li>Develop a big vision that is broken into small parts, allowing for course corrections</li> <li>Smaller, iterative projects using Agile methodology</li> </ul>   | <p>IIT is shifting away from large waterfall IT projects by:</p> <ul style="list-style-type: none"> <li>Emphasizing common services so projects don't duplicate existing products – leading to projects that are smaller in scope, cost and time to implement)</li> <li>Starting with a shared vision and a project portfolio roadmap, then undertaking small, iterative projects that contribute to achieving it, rather than tackling the whole thing at once</li> <li>Creating dedicated agile teams</li> </ul> |
| No upfront definition of value for citizens, industry and                                     | <ul style="list-style-type: none"> <li>Start with baseline data to quantitatively assess value and qualify qualitative assumptions</li> </ul>  | <ul style="list-style-type: none"> <li>IIT is committed to creating business cases that are driven by value and projects that are implemented with value at the core</li> </ul>  |

| Issue Identified                     | Solution  | IIT's Plan to Deliver   |
|--------------------------------------|---|---|
| government<br>(benefits realization) | <ul style="list-style-type: none"> <li>Baseline data is aligned to outcomes for citizens, industry competitiveness and economic growth across the province</li> </ul> | <ul style="list-style-type: none"> <li>A benefits realization function will be embedded in IIT to work with programs and be part of business readiness assessments</li> </ul> |

### *Transition to Operations*

In their March 2018 report, Gartner recommended “a transition plan to provide for the expedient close-out of NRPP/NRTS – ensuring the smooth transition of people, capital/operating funding dollars and existing or ongoing projects to [IIT] as soon as is reasonably possible.” As soon as the NR Board announced its intention to implement this recommendation, the newly-formed IIT began to transition to an operational state for NRPP services. In January 2019, Treasury Board approved one-year funding to support transition activities to ensure NRPP services will move successfully from project mode to operations. The remaining activities include transitioning the governance, staffing and funding models.

### *Governance*

With the close out of the NRPP project, IIT is shifting away from the project governance structure that was in place for NRPP to integrate with – and strengthen - the standard approach to IMIT governance in the NRMs. This includes a refreshed NRM IMIT Investment Board and a renewed focus on ensuring an integrated view of priority setting and investment recommendations across the NRMs. In the coming months, IIT will evaluate the potential benefit of striking an ADM-level IMIT sub committee.

### *Staffing*

As is the norm when a project winds down, NRPP staff are being transitioned to NRM program areas, IIT, and other projects and opportunities inside and outside government.

### *Changes to Program Areas*

During NRPP, staff from program areas were deployed to the project to support the work and ensure business needs were reflected throughout the process. With the close out of the project, these individuals are returning to their previous roles within the NRMs to support the transition to operations. There is still work to be done in the program areas to assess the

impact of the new NRPP services on their respective program area, including processes, workflows, roles and responsibilities and resource needs. As the new services are stabilized and enter their steady state, program areas will begin to realize the benefits of streamlining and transformation envisioned by the project. Some project resources have been deployed to program areas through June 2019 to help the program areas manage the change.

#### *IIT Complement of Staff*

The integration of the former IMB and NRTS into the new IIT has led to some shifts in roles and responsibilities for some members of the NRPP team. The IIT leadership team is actively seeking roles for all remaining members of the former NRPP team. IIT will continue to work with Strategic Human Resources and the BC Public Service Agency as needed to ensure a smooth transition. There is no workforce adjustment contemplated and IIT does not anticipate any issues that would require engaging the BCGEU, however, if issues arise, IIT will coordinate with BCPSA to resolve them.

#### *Evolving Partnership Model*

IIT is building a proactive & collaborative approach to partnering with NRM program areas to understand and respond to their evolving business needs and deliver opportunities for continuous improvement for their services. In the new model, business owners will drive the business change and bring their program expertise to the partnership, while IIT will bring their expertise in user design and technology with a focus on the client experience. This is the basis for how modernization, business redesign and innovation will be delivered.

#### *Staff Transition*

Table 3 shows the status of staff who were in NRPP immediately prior to the announcement that the project would be wound down. Although NRPP had reached a high of approximately 65 FTEs, this had been reduced to 50 FTEs by June 2018. Not included in the table below are staff who were funded by, and dedicated to, NRPP but resident within the program areas of FrontCounter BC and Forestry. The responsibility to seek ongoing funding for those positions remains with the program areas.



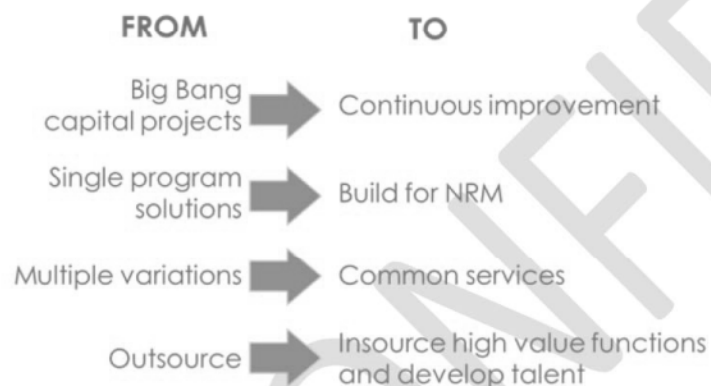
**Table 3 – Summary of Staffing Shifts from NRPP**

| NRPP Staff from June 2018  | Current Status |
|--|----------------|
| In Government (IIT) – Transitioned to roles within IIT               | 24             |
| Returned to base positions/found new positions within public service | 19             |
| Left Govt  | 6              |
| Retired  | 1              |

***Funding the Transformation & Innovation Mandate***

The funding to transition NRPP projects and services to steady state operations has been secured. IIT is now seeking to confirm funding that will allow it, on behalf of the NRM program areas, to move beyond “keeping the lights on” to implement an integrated, proactive and collaborative partnership approach to innovation, business redesign and technology development.

**Figure 2 – Summary of IIT Shifts**



More specifically, these shifts will mean:

1. A new approach to investment that will achieve better outcomes by decreasing reliance on the capital funding model and process, managing NRM needs as a portfolio, and increasing availability of re-usable common services.
2. Human resources capacity to do more by expanding knowledge, skills and talent and decreasing reliance on more costly contractors.

### *Expected Benefits to NRMs*

With the funding requested, IIT anticipates:

- Programs will get more service, faster, from the new approach;
- Increased flexibility in resource deployment for shifting priorities;
- Broader modernization of systems, continuously;
- Investment that benefits the sector and individual program areas;
- A growing catalogue of re-usable common services, components and code;
- Overall decrease in costs through re-use and development of internal capacity; and
- Increased transparency and accountability in governance and decision-making.

### **7.0 Conclusion and Next Steps**

Despite the successful implementation of new NRM services, there were still challenges with NRPP. By combining the mandates and functions of the previous IMB and the NRPP/ NRTS, the new IIT benefits from the reliability, consistency and transparency of the former IMB, and the transformation and change management mindset of the former NRPP/NRTS. The NRMs have better positioned themselves to meet their strategic and operational business needs and demonstrate leadership across government in implementing leading industry practices for IMIT investment in a digital government.

As the implementation of the division continues, focus will be on demonstrating value to each ministry, and shifting the approach to a flexible project model and an increased reliance on internal resources, in order to deliver on the new mandate for innovation, business redesign and technology development.

## 8.0 Appendices

*Appendix A – Status of Deliverables Against Commitments*

*Appendix B – Projects Terminated or Paused Before Completion*

*Appendix C – Annual Independent Reviews and Reports*

*Appendix D – Alignment to Best Practice in IT Investment*

*Appendix E - Summary of Benefits Realized*

CONFIDENTIAL

## Appendix A – Status of Deliverables Against Commitments

The scope of NRPP was delivered through a collection of projects tracked individually but bundled as an integrated portfolio within three major workstreams. Each project contributed to one or more elements of aligning legislation, processes, people and technology through a phased investment approach.



**Figure 3 –NRPP Workstreams**

The following tables outline the status, as Spring 2019, of progress toward the commitments.

**Table 4 – Status of Business Transformation Activities**

| Scope Component  | Commitment   | Status – April 2019  |
|--|--|--|
| <p>Authorization Processes:</p> <ol style="list-style-type: none"> <li>1. Archaeology</li> <li>2. Cutting Permits</li> <li>3. Mines Notice of Work</li> <li>4. Occupant License to Cut</li> <li>5. Private Timber Marks</li> <li>6. Range</li> <li>7. Resorts</li> <li>8. Water Name Change</li> </ol> | <p>Clients can apply online<sup>7</sup> for authorizations in these business areas and expect streamlined application processes and faster approval timelines.</p> <p>Streamlined business processes used for applying / approving submission to the NR Sector. Online submitting, tracking, managing authorizations and linking to other NR Sector systems.</p> | <p>Activity-based bundled authorization for Mines Notice of Work launched in December 2018.</p> <p>MyRA Range Use Plan application launched in February 2018.</p> <p>Occupant Licence to Cut volume &amp; stumpage tools launched in April 2019.</p> <p>Online Archaeological Site Form completed March 2019. Will be launched after full mobile BCeID enablement.</p> <p>Cutting Permits Smart Forms (as part of an integrated forestry project) built tested and deployed in March 2019 for launch with other forestry enhancements later in the year.</p> |

<sup>7</sup> NR Online Services gives clients and staff the ability to view the most current and accurate NR data available (search for opportunities to conduct natural resource activities, review plain language guidance documents outlining steps to complete an application). The initial launch of functionality is a preview of capabilities expected.

| Scope Component   | Commitment   | Status – April 2019   |
|---|--|---|
|   |  | <p>First phase of Water Name Change (notification from Land Title and Survey Agency of change of ownership) completed in January 2017.</p> <p>Future State definition work complete for all eight areas.</p>  |
| Public Review and Comment Service   | The public can review and comment on proposed natural resource development activities through NRS Online Services.   | Public Review and Comment service (Applications, Comments and Reasons for Decision) launched for Crown Lands applications in Apr 2018.  |
| <p>Cumulative Effects / Common Objectives and Integrated Resource Management</p> <p>(a framework and tools to assist decision makers in assessing the holistic impact of their decisions)</p> | <p>Clients can access cumulative effects assessments and receive guidance on management recommendations prior to submitting an application.</p> <p>A framework and tools to assist decision makers in assessing the holistic impact of their decision.</p> <p>Priority cumulative effects data available to guide decision making, taking into account past, present and future activities and their impacts to environmental and economic values over time.</p> | <p>Initial cumulative effects values and data structures defined (used in the authorizations process).</p> <p>Publication of values to proceed subject to priorities of regional ADMs.</p> <p>Assessment protocols have been approved for aquatic ecosystems, grizzly bear, moose and old growth forest.</p> <p>Initial five Cumulative Effects values have been defined and loaded to the BC Geographic Warehouse.</p> |

| Scope Component  | Commitment  | Status – April 2019  |
|--|---|--|
| Crown Lands<br>Business transformation definition and implementation | Clients can apply online for authorizations in these business areas and expect streamlined application processes and faster approval timelines. | <p>Design and build complete for transition of Crown Lands authorizations from virtual FrontCounter BC to NR Online Services Platform.</p> <p>Future state definition of Crown Lands authorization complete and agreed with business area.</p> <p>User acceptance testing and deployment paused due to Business resource constraints. Project archived to be completed in the future according to Ministry priorities.</p> |
| Electronic hunting licensing   | The public can apply online for hunting licenses.   | <p>Online BC-resident hunting licenses and conservation officer mobile applications launched in April 2017.<sup>8</sup></p> <p>Non-resident applications and guide-outfitter supporting functionality launched in April 2018</p>   |

---

<sup>8</sup> Gives BC resident hunters easy access to the Fish and Wildlife ID (which replaces the Hunter Number), as well as the ability to apply online for Limited Entry Hunting (LEH).

## Technology Foundation

**Table 5 – Status of Technology Foundation Activities**

| Scope Component   | Commitment   | Status – April 2019  |
|---|--|--|
| NR Online Services Release 2  | <p>Clients can access guidance and applications for additional <b>authorizations</b> through NRS Online Services.</p> <p>Foundational technical infrastructure to hold all rules, process and public interaction tools together.</p> <p>Initial development of tools for online authorizations, reporting, finance. Foundational technology.</p> | <p>Explore<sup>9</sup> capability launched in October 2016; enhancements to guidance and applications ongoing.</p> <p>Foundation components, including client and staff portal, client management service, common finance, document management and document generation launched for Notice of Work Bundle in December 2018</p> |
| <p>Common Client</p> <p>(one client record required to interact with the NRM)</p> | <p>Clients can register once to do business online with the NRS, and be assigned a single client identifier.</p> <p>One client record required to interact with NR Sector.</p>   | <p>Client Management service launched with first bundled authorizations in December 2018.</p> <p>All BCeID identities are supported, and BC Services Card to be enabled in FY19/20</p>   |

<sup>9</sup> Clients can explore by location or by activity and can run an area of interest evaluation report. This report provides a written summary of important information such as existing land rights, resource constraints and environmental considerations for the selected geographic area.



| Scope Component  | Commitment  | Status – April 2019  |
|--|---|--|
|  | Ability for proponents to view and manage consolidated account information through an online portal.  |  |
| Common Finance<br>(one place to manage NR billings and fees) | <p>Clients can receive integrated bills, pay fees, and view financial statements online.</p> <p>Consolidated view of fees and billings for staff and clients.</p> <p>Some proponents can access sector wide, integrated statements, bills and financial history (full financial integration).</p> | <p>Common Finance functionality in place and launched in December 2018 to provide consolidated fees and integrated bills.</p> <p>Requirements and design for fully functional revenue &amp; receivables management service prepared but project paused indefinitely for re-evaluation.</p> |
| Document Management/<br>Document Generation                  | <p>Clients can attach documents electronically to applications.</p> <p>Initial capability to centrally store, share and manage NRS records and documents in electronic (rather than paper) format.</p>  | Document Management functionality and Document Generation service launched with first bundled authorizations in December 2018.   |
| Hardware & Software Purchases                                | Essential hardware and software required for Phase 1 in place   | Hardware and software acquisition to support Natural Resource Online Services platform have been deployed.   |
| System Modernization   | Updating, consolidating and linking critical systems required to keep NR Sector business flowing and quicker decisions being made.  | NR Online Services platform integrated with existing systems.  |

| Scope Component   | Commitment   | Status – April 2019  |
|---|--|--|
| Operational Spatial Database<br><br>(one current, authoritative, co-located source of operational data) | <p>Clients can access additional datasets and spatial information through NRS Online Services.</p> <p>Provides a map view available to clients, staff and public of all activities and information available on the land base through an online map viewer.</p>  | <p>Operational Spatial Database service live with Explore service.</p> <p>Data sets being added as required.</p>   |
| NR Online Services  | <p>Clients can access improved tools and features, including self-subscription and referrals services.</p> <p>This project will create a re-useable framework that will allow projects to on-board to NRS Online Services with a minimal amount of custom programming. Some of the specific areas to be addressed include smart forms, client portal and staff portal.</p> | <p>Smart forms, client and staff portal enhancements - including staff-entered applications and staff maintained smart-forms (staff administration screens) launched in March 2019.</p> <p>Enhancements to client enrollment processes, including test and deployment of BC Services Card functionality in March 2019.</p> |
| Mobile enhancements   | Staff have mobile access to data in the field.   | Mobile application framework delivered for MyRA mobile application in conjunction with OCIO pathfinder project.  |
| Hardware and Software acquisitions  | Funds will be invested in the required hardware and software to support the technical changes.   | Hardware and software acquisition complete and deployed for NR Online Services platform, subject to ongoing review of NR ministries' infrastructure needs.   |
| Pre-application enhanced capabilities   | The NRS Online Services pre-application solution provides  | Ongoing enhancements to pre-application (Explore) service, including   |

| Scope Component | Commitment   | Status – April 2019  |
|-----------------|--|--|
|                 | proponents with an activity-based guidance for authorization application processes and requirements. Work will include gathering requirements and the design/build/test/implementation of a number of enhanced capabilities. | additional data layers (eg Archaeology data), updated guidance and improved functionality and performance. |

## Governance

**Table 6 – Status of Governance Activities**

| Scope Component                  | Commitment  | Status – April 2019  |
|----------------------------------|---|--|
| Alliance Management              | <p>Productive working relationships with vendors.</p> <p>Portfolio-level project management, governance, change management and systems integration to guide Phase 1 implementation.</p> | Contracts for delivery support complete and majority of vendors successfully off-boarded from the project.   |
| Leadership team & administration | Strong leadership and appropriate administrative support. Effective stakeholder engagement and communications activities to support successful adoption and sector transformation.      | <p>Effective leadership, governance and administrative support in place and under continuous improvement.</p> <p>Change management and communications activities resourced and</p> |

| Scope Component      | Commitment  | Status – April 2019   |
|----------------------|---|---|
|                      | Portfolio-level project management, governance, change management and systems integration to guide Phase 1 implementation.  | providing on-going communication and business change leadership.  |
| Portfolio management | Robust project, program and portfolio management.<br><br>Portfolio-level project management, governance, change management and systems integration to guide Phase 1 implementation.         | Robust and effective project, program and portfolio management disciplines in place. Lessons captured for future initiatives. |
| Standards assurance  | Consistent technical standards used across the portfolio.<br><br>Portfolio-level project management, governance, change management and systems integration to guide Phase 1 implementation. | Technical standards and compliance processes under review and continuous improvement.   |
| Architecture         | Architecture will provide direction and coordinate alignment of the structure and operation of Natural Resource   | Consistent NRM Authorization Workflow <sup>10</sup> defined for new Sector Operating Model <sup>11</sup>                      |

<sup>10</sup> A common workflow model for approving or rejecting authorizations and for managing on-going obligations associated with those authorizations (life cycle) for all ministry business areas. Each business area will use the common workflow model as their foundation while also able to incorporate specific needs unique to that line of business.

<sup>11</sup> Describes why and how the ministries need to make authorization decisions in an integrated way through changes to policy, processes, regulation, legislation, human resources, workforce and systems.

| Scope Component  | Commitment   | Status – April 2019   |
|--|--|---|
|  | Transformation Secretariat (NRTS) initiatives. Specific focus will be on business, technology, solution, data and security architectures.  | and applied to Notice of Work and Crown Land initiatives.   |
| Prudent management and oversight of the project consistent with industry best practices and informed by central government | In addition to the specific projects, funds will be invested to support governance initiatives needed to ensure the prudent management and success of the project. This includes third party review, vendor and change management resources. | Leadership, governance and administrative support in place. Robust and effective project, program and portfolio management disciplines in place and subject to regular third-party review. Comprehensive project closure activities underway. |

### Appendix B - Projects Terminated or Paused Before Completion

The following projects or initiatives were undertaken under NRPP but terminated early or paused for a variety of reasons. Lessons have been documented to inform future development activities:

**Table 7 – Projects Terminated or Paused Before Completion**

| Project / Initiative   | Reason for change in direction   | Status – April 2019   |
|--|--|---|
| Mobile Enablement  | Decision to integrate with OCIO initiative for Mobile Pathfinder.  | Framework and demonstrator produced, but never enabled – project replaced by OCIO Mobile Pathfinder initiative. |
| Operational Spatial Database   | Temporality functionality not able to be delivered with technology solution.                             | OSDB in use, but without temporal functionality.  |
| NRS Revenue and Receivables Management   | Significant expansion of scope and cost. Decision to integrate with OCIO Accounts Receivable pathfinder. | Project paused with initial components built and tested. Requirements and design for solution complete.         |
| Business Transformation Definition for Private Timber Marks, Mountain Resorts, Wells | Visioning complete in anticipation of future business transformation activity.                           | Project stopped.  |
| Water Name Change Phase 3 and 4  | Challenges in implementing proposed technical solution outweighed potential benefits.                    | Project stopped.  |
| Occupant Licence to Cut Phase 2  | Visioning complete in anticipation of future business transformation activity.                           | Project stopped.  |
| Crown Lands Re-platforming   | Assessed as low priority for funding as a stand-alone initiative.  | Codebase built and tested. Project paused for subsequent integration with other Crown Lands activities.         |

| Project / Initiative   | Reason for change in direction  | Status – April 2019   |
|--|---|---|
| Crown Lands Process Standardization / Robotic Process Automation | Pilot initiative developed and deployed, but assessment by business area that further work. required on process standardization before implementing a technical solution. | Pilot in place, further development being taken forward within the business area. |

CONFIDENTIAL

## *Appendix C – Independent Reviews and Reports*

### **First Report**

In Fall 2014 PwC was engaged to perform an independent, objective and high-level program review of NRPP Phase 1. This was intended to contribute to DMCTT's deliverable associated with documenting program progress and was a prerequisite for release of the remainder of Phase 1 Year 1 funding.

In this first report, PwC identified 12 high level areas for action with 47 specific recommendations. The NRTS further disaggregated the 47 recommendations into 80 more detailed recommendations in the categories of Change Request, Risk/Issue Management, Integrated Planning, Governance, Change Management and Quality Management.

### **Second Report**

In November 2015 PwC delivered a second report<sup>12</sup> in which they assessed progress toward the 80 detailed recommendations arising from the November 2014 report. Of the detailed breakdown of 80 recommendations, PwC found:

- **61** completed and/or well underway
- **11** in progress or partially implemented and gaps remain.
- **3** planned future improvements in the near term.
- **1** incomplete and not implemented.
- **4** no longer apply as a result of changing requirements of the project or were items not associated with a recommendation.

### **Third Report**

In March 2017 KPMG was commissioned by the IMIT Capital Investment Board to deliver an NRPP program health check and to pilot the Common IMIT Project Governance and Assurance Framework. The scope of the health check included

---

<sup>12</sup> Final Report: High level review to assess implementation status of prior gaps & recommendations. PwC. Delivered November 2015.



select high-priority categories within the following seven areas: (1) Program Governance; (2) Project Management; (3) Change Management; (4) Performance Management; (5) People; (6) Process; and (7) Data and Technology.

An action plan was prepared and implemented to respond to the 18 findings of this review.





#### Fourth Report -







A fourth report was commissioned by NRPP to deliver a final performance review. This review is ongoing at the time of writing.



\*\*\*

The following tables provide additional information about the reports:

**Table 8 – First and Second Reports: PwC's Assessment of NRPP's Response to PwC Recommendations**

| Category          | PwC Recommendation<br>November 2014   | Status<br>Nov 2015   | PwC Assessment<br>November 2015   |
|-------------------|---|--|---|
| Change management | Fully implement the program change order management process already defined.                        |    | Change request management process is in place, decisions are being tracked and managed.   |
| Risk management   | Enhance and elevate the current risk management process within NRPP.                                |    | The risk management process has been defined however some recommendations have not been implemented and mitigation strategies could be more clearly enunciated. Risks that are closed may be ongoing risks that need to be monitored. |
|                   | Comprehensively document and align the scope and outcomes of the NRPP projects with NRPP objectives |  | The integrated plan has resulted in better alignment of the NRPP projects with objectives.  |
|                   | Select, communicate and enforce standard NRPP methodologies for Project                             |  | NRPP project management methodologies have been built out – including an SDLC project plan template.  |

| Category            | PwC Recommendation<br>November 2014  | Status<br>Nov 2015   | PwC Assessment<br>November 2015  |
|---------------------|--|--|--|
|                     | Management and Systems Development Life Cycle (SDLC).  |  | There is ongoing discussion between MTICS IMB and the NRPP on Agile methodologies.   |
| Integrated planning | Continue to establish fully integrated and functional work plans.  |    | The integrated plan has been a good development that allows for better insights across the project portfolio.  |
|                     | Refine Project, Program and Portfolio level status reporting and dashboard to provide an expanded and accurate representation of current and future progress, trends and issues. |    | The dashboard reporting provides sufficient details for executive level review of the portfolio and project status.  |
|                     | Increase the scope and commitment by NRPP to organizational change management and communications.  |    | There is a strong commitment to change management and actions have been taken to communicate with stakeholders, however resourcing challenges have been a serious challenge (although there is a plan to remedy this). |
|                     | Complete and implement a NRPP financial management process definition.   |   | The PMO handbook process has been updated and financials are being tracked.  |
|                     | Expedite the implementation of NRPP benefits management process.   |  | The benefits management process has been established and is being tracked.   |
|                     | Expedite the implementation of NRPP procurement and vendor management processes  |  | A vendor management office has been established and a vendor management strategy and process is in place.  |

| Category   | PwC Recommendation<br>November 2014                                      | Status<br>Nov 2015   | PwC Assessment<br>November 2015   |
|------------|--|--|---|
|            | Define and integrate a NRPP quality management process to mitigate risk. |  | A quality management process is in place and external assurance has been integrated into the process. Given the status of some project deliverables, a risk has been identified by NRPP internal processes and resourcing issues may impact quality management. |
| Governance | Evolve governance model to more effectively support NRPP                 |  | At a high level it appears as though the governance has improved on the NRPP. The integrated plan has allowed for a portfolio view of the projects.   |

**Table 9 – Third Report: Response and Status of KPMG's Health Check**

| Issue   | Recommendations  | Program Response  | Progress   |
|---|--|---|--|
| <b>GOVERNANCE</b>   |  |   |  |
| NRPP Governance Alignment with Sector Transformation Accountability and Authority | <ul style="list-style-type: none"> <li>Re-align NRPP with NR Sector governance and transformation authority, and operating model (NR Board and NRS ADMs Committee).</li> <li>Update terms of reference as required.</li> </ul> | Sector governance being addressed with DM and ADM committees. Terms of reference to be updated in due course. | <b>May 2018: Complete.</b><br>Project Board strengthened role in NRPP oversight. |

| Issue                                    | Recommendations   | Program Response   | Progress  |
|--|---|--|---|
| Full NRPP application life-cycle funding | <ul style="list-style-type: none"> <li>Account for full life-cycle funding from capital thru to maintenance and operations.</li> <li>Increase coordination between treasury application and funding approval, release management and go-live transition, and ongoing Sector operating budgeting and approval activities.</li> </ul> | Alignment between NRTS and IMB improving with clearer consideration of support / maintenance costs and funding.  | <b>May 2018: Complete.</b><br>Treasury Board drafting completed incorporating both Capital and Operating funding requirements.  |
| <b>PROJECT MANAGEMENT</b>                |   |  |   |
| Project Templates and Documentation      | <ul style="list-style-type: none"> <li>Refresh the Sector project management / SDLC processes to follow the IMIT common Project Governance, Project Management and Project Assurance.</li> <li>See 'NRPP – IMIT Framework Pilot' for proposed Common IT Project Management and Audit Framework</li> </ul>                           | NRPP follows sector-standard System Development Lifecycle, tailored as necessary to meet the needs of the program.<br>NRTS continues to influence the content of the SDLC to ensure it remains appropriate | <b>May 2018: Complete:</b><br>Refresh of sector SDLC complete and incorporated within NRPP processes. Ongoing review and update of processes to ensure incorporation of lessons and continuous improvement. |

| Issue                   | Recommendations  | Program Response   | Progress  |
|-------------------------|--|--|---|
| Project Complexity      | <ul style="list-style-type: none"> <li>Define processes and controls required to manage projects at different levels of complexity; define criteria for each stage of complexity.</li> </ul>   | <p>Project management processes are kept under continual review and improvement taking account of lessons within and external to NRTS. Tailoring of projects based on their complexity underway with new delivery model refinements.</p> | <p><b>May 2018: Complete:</b><br/>Project complexity criteria established for future NRTS initiatives.</p>  |
| Stakeholder Involvement | <ul style="list-style-type: none"> <li>Actively engage business units earlier and throughout the deliverable development process (i.e. planning, risk identification &amp; assessment, deliverable development, review and sign-off).</li> </ul> | <p>More active stakeholder involvement in planning implemented for FY18. Increased emphasis on stakeholder analysis, needs assessment and communication plan as part of project scope.</p>   | <p><b>Feb 2018: Complete:</b><br/>Stakeholder cross-over matrix in place and continued emphasis on early and regular business engagement for all projects. Further adoption of Agile principles supportive of this.</p> |

| Issue                      | Recommendations  | Program Response   | Progress   |
|----------------------------|--|--|--|
| Risk Identification        | <ul style="list-style-type: none"> <li>Embed risk identification as part of the planning review stage gate checklist process to enforce consistency of risk identification during project planning/charter development.</li> <li>Align communication plans' degree and frequency of stakeholder engagement with respect to project risk/issues.</li> </ul> | Greater emphasis on risk identification and management of risk as part of FY18 planning. Revised risk and issue management processes to incorporate lessons learned from FY17. | <b>May 2018: Complete:</b> Project planning workshops held and project charters for FY18/19 drafted. Risks identified through planning incorporated into NRPP risk register. |
| CHANGE MANAGEMENT          |  |  |  |
| Business Change Agent Role | <ul style="list-style-type: none"> <li>Fully implement change agent role for each NRPP project</li> </ul>  | Change Agent network established; Business Change advisors and consistent change management deliverables implemented for all projects.   | <b>Feb 2018: Complete.</b> Change Agent Network re-launched for 2018 and in operation.   |
| Change Ownership           | <ul style="list-style-type: none"> <li>Clearly define and communicate sector change ownership accountabilities across foundational projects (e.g. common client or document management)</li> </ul>   | IMB and NRTS transformation governance has established community model for shared component ownership.   | <b>May 2018: Complete:</b> Community ownership model in place for Explore and work complete on ownership for Notice of Work.   |

| Issue                        | Recommendations  | Program Response  | Progress  |
|------------------------------|--|---|---|
| <b>PERFORMANCE FRAMEWORK</b> |  |   |   |
| KPI Goals and Monitoring     | <ul style="list-style-type: none"> <li>Define and implement KPIs -in line with key Sector / NRPP objectives and priorities.</li> <li>Consider process for mid-flight adjustments to KPIs based on risks/ priorities (e.g. staff onboarding/ skills shortages may be a key issue).</li> <li>Communicate business performance improvement goals, objectives, KPIs and monitoring process to key persons associated with the project</li> </ul> | High-level benefits management process shared with ADM Steering Committee, but dependent on business area resources to monitor / implement. Performance measures being established as part of project initiation. | <b>May 2018: Complete.</b><br>Project performance measures identified in project charters and shared with business areas through planning process |
| Supplier KPIs                | <ul style="list-style-type: none"> <li>Finalize and communicate criteria for determining when to pause/ stop a project.</li> </ul>   | Project pause process developed and implemented in April 2017. Stage gate process subject to continuous review and improvement.   | <b>Feb 2018: Complete.</b><br>Strengthened service levels and vendor obligations in new vendor agreements   |

| Issue  | Recommendations   | Program Response   | Progress  |
|--|---|--|---|
| Benefits management strategy                         | <ul style="list-style-type: none"> <li>• Work with Sector leadership to formalize, document and communicate refreshed Sector priorities and benefits management plan/framework.</li> </ul>  | High-level benefits management process shared with ADM Steering Committee, but dependent on business area resources to monitor / implement. Performance measures being established as part of project initiation.  | <b>May 2018: Complete:</b> Benefits management framework developed and shared with ADM Steering Committee.          |
| Third Party Service Delivery: Incentives and Rewards | <ul style="list-style-type: none"> <li>• Formalize, document and communicate performance incentives/ penalties for third party service delivery.</li> <li>• Complete transition to new vendor contracts to enact revised penalty clauses by end of the 2017/18 fiscal year</li> </ul> | New approved vendor lists in place; first statements of work being drafted and issued. Limited to no opportunity to incorporate formal vendor incentives in existing contracts. Statements of work and task specifications to include expected learning curve improvements; expectation of over delivery by vendors is not in line with government procurement policy. | <b>Feb 2018: Complete:</b> Vendor performance measures reflected in new Invitations to Compete issued to the market |



| Issue  | Recommendations   | Program Response   | Progress   |
|--|---|--|--|
| Segregation Between PM and Technical Work Package Delivery | <ul style="list-style-type: none"> <li>Use different vendors for PM and technical delivery to ensure appropriate handover of deliverables and unbiased independent project management reporting.</li> </ul>   | Vendor procurement refresh complete and new statements of work being issued. Steps taken to ensure appropriate level of independence between project management and technical package delivery. Province-led PMO team also identifies potential conflicts of interest. | <b>Feb 2018: Complete:</b> New Invitations to Compete issued. Provincial Program Directors and PMO / AMO team in place to monitor any conflicts  |
| <b>PROJECT LEADERSHIP</b>                                  |   |  |  |
| Role Definition  | <ul style="list-style-type: none"> <li>Develop a program RACI chart to help clarify roles, responsibilities and accountabilities across the program.</li> <li>NRTS is currently redefining and implementing the NRTS delivery model to clarify roles, responsibilities and accountabilities.</li> </ul> | New Program Delivery Model (including RACI for functions) developed for FY18 and being communicated and implemented  | <b>Feb 2018: Complete.</b> Role profiles and role definitions for new program delivery model in place and communicated. Ongoing development as more agile delivery techniques are adopted. |
| <b>PR</b>  |   |  |  |

| Issue              | Recommendations   | Program Response   | Progress  |
|--------------------|---|--|---|
| Records Management | <ul style="list-style-type: none"> <li>Develop governance, retention and compliance policies and procedures for records management in the program.</li> <li>Implement controls to better manage who can access and modify key program and project document records in compliance with above policies.</li> </ul>  | Sharepoint repository being more closely aligned with government records management policy. Sharepoint administration management in place. | <b>Jun 2018: Complete:</b><br>Action plan for records management developed and being implemented  |
| Secure by Design   | <ul style="list-style-type: none"> <li>Implement secure by design concepts to bring security into the beginning and subsequent stages of the systems development lifecycle to help ensure inherent risks to the application and the architecture are addressed during design and development.</li> <li>Enforce secure by design concepts through the program's stage gating process.</li> </ul> | Working with sector security lead to ensure timing and content of threat and risk assessments aligns with sector policy                    | <b>Aug 2018: Complete:</b><br>Design activity being undertaken in accordance with technical architecture principles and verified through STRA process. STRA completion incorporated as a deliverable at Build Readiness Stage Gate. |

| Issue  | Recommendations   | Program Response   | Progress   |
|--|---|--|--|
| <b>TC</b>  |   |  |  |
| Technology Architecture Committee                  | <ul style="list-style-type: none"> <li>NRPP should sit on the architecture committee to represent the Sector's transformation objectives</li> <li>NRPP should conduct a deep dive review on the integrated Sector technology architecture to better understand and communicate to Sector leadership the pros/cons and costs associated with a highly configurable custom environment versus an off-the-shelf solution.</li> </ul>   | Review of ISSS and NRPP technology architecture underway, including selection of COTS and cloud-based solutions.   | <b>Jun 2018: Complete:</b> Business Architecture incorporated in Authorization Workflow; being transferred to FrontCounter BC. Decisions on technology architecture now largely complete for remaining components of NRPP. |
| Application Maintenance and Legacy Decommissioning | <ul style="list-style-type: none"> <li>Embed the handover requirements in the project charter and involve IMB upfront so their operating submissions to the NR board account for the ongoing maintenance ahead of time and are in turn embedded in IMB's plans and funding submissions.</li> <li>Decommissioning of legacy systems (applications that are intended to be decommissioned and are a part of the original business case) should be monitored and reported on the NR Board and NRPP Project Board.</li> </ul> | Greater involvement of IMB Service Management Team in project planning, including service maintenance and handover. Deployment manager role established to include consideration of ongoing application maintenance and support. | <b>May 2018: Complete.</b> Transition to Operations underway for Foundation and Notice of Work - pattern to be utilised for other applications.  |

## Appendix D – Alignment to Best Practice in IT Investments

In addition to the independent project reviews, NRTS worked to align NRPP to documented leading practices for large public sector projects. The following table outlines NRPP's alignment to the Office of the Auditor General's October 2016 report *Getting IT Right*, in which the OAG "combines knowledge from previous audits with extensive research on IT-enabled projects in B.C. and other jurisdictions to identify common reasons for success and failure."<sup>13</sup> As noted in the table below, NRPP experienced challenges despite best efforts. This led to Gartner's recommendation to close out NRPP, and to a fundamental rethinking of the approach to IMIT projects in the NRMs.

**Table 10 – Alignment to Best Practices in IT Investments**

| Best Practice  | NRPP Approach  |
|--|--|
| <b>PEOPLE</b>  |  |
| Does the organization have the systems development and project management expertise to match the complexity of the IT-enabled project? | A dedicated organization – NRTS - was created. Staff with expertise in large projects were recruited from inside and outside government. Contracted vendor expertise was secured as needed to support the project team. Retendering for services has significantly increased the number of vendors with expertise from which the project can draw. However the complexity and large scope of the task, combined with staff turnover, presented significant challenges. |
| Does the organization have a plan to fill gaps in capacity or expertise?   | NRTS had a talent management strategy to secure staff. Contracted resources were engaged when recruitment efforts were unsuccessful. NRTS aggressively promoted stretch opportunities and cross training to high performing staff to build their competence and enable better succession capacity.   |

---

<sup>13</sup> <https://www.bcauditor.com/pubs/2016/getting-it-right-achieving-value-government-information-technology-investments>

| Best Practice  | NRPP Approach   |
|--|---|
| Where external consultants are used, does the organization have the capacity to procure, negotiate and manage the arrangement to achieve the expected benefits?                | The NRPP Alliance Management Office had expertise in the management of external consultants, and processes were in place for monitoring and control. A re-tendering of project support services increased the project team's ability to measure vendor quality and hold vendors accountable through its contract structure. Lessons were shared with the Ministry of Justice through a joint procurement process. However, there were cases when temporary functionality failure was not reflected in reduced billings by the service provider. |
| If delivery of an IT system and service will be outsourced, does the organization have a plan to retain key staff with the expertise necessary to manage the contract?         | Though the team intended to offer succession planning for in-house staff involved in IT system deliver, this may not have been delivered in a robust way.   |
| Is there an executive sponsor for the project, with clear authority and accountability?  | The Executive Business Sponsor for NRPP was also the Chair of the NRPP Project Board and a member of the Natural Resource Board and the cross-government IMIT Capital Investment Board. A recent external report has pointed to perceived ambiguity about this role at the executive level.   |
| <b>PLANNING</b>  |   |
| Does the business case include a rigorous analysis of the project's assumptions, options, benefits and costs; and, does it align with the organization's needs and priorities? | The business case was developed by the NR ministries and approved by the NR Board, the OCIO, DMCTT and Treasury Board staff. Treasury Board approval was obtained for Phase 1 of the business case as well as additional scope item from Year 3 of the project onward.  |
| Has the organization identified and planned for the extent of change the project will have on structures and roles,  | The transformation approach included a visioning process to identify and plan for the magnitude of change the project would have on structures and roles, business processes, and required skills and expertise. The project had a dedicated Change Management Office that worked with the lines  |

| Best Practice  | NRPP Approach   |
|--|---|
| business processes, and required skills and expertise?   | of business to manage and mitigate change impacts through to implementation. In practice, however, the magnitude of the impact was greater than anticipated and required extensive use of contractors and NRPP staff in the change management area during the implementation. This led to pressure on resources within the project team.  |
| Does project planning clearly identify and manage critical risks, including an identification of which risks government has decided to accept, mitigate or transfer?       | Risks were identified during the planning process as well as through regular dedicated risk management meetings. Risks were identified at the portfolio, program and project levels.  |
| Does the investment rely on proven or new technology? If new technology is required, does the organization have a plan to mitigate the risks of using unproven technology? | Technology used is largely proven and has been deployed in multiple other government enterprise environments. Risks associated with new software development were identified and mitigated where possible. However, NRPP does not appear to have actively researched lessons learned and best practices from other implementations of similar technology which could have reduced risk and improved efficiency.   |
| Can projects be broken into smaller, self-contained phases with value on their own?  | <p>NRPP was divided into several projects, each with its own charter setting out key deliverables and expected benefits. NRPP operated on a yearly approval cycle where all governance levels including Treasury Board evaluated the outcomes produced. Constituent projects were themselves broken into value-delivering phases, where practicable.</p> <p>During the July 2018 pivot, executive direction was to further break down work into smaller phases. This led the team to rethink the deployment plans in the context of agile methodology for common services continuous improvement. This work is planned for summer 2019.</p> |
| CONSULTATION   |   |

| Best Practice  | NRPP Approach   |
|--|---|
| <p>Is the project team maintaining effective engagement with key stakeholders to understand their needs, and to ensure their understanding of and commitment to the project?</p> | <p>Project teams included communication, and engagement and change management specialists to maintain on-going active engagement with key stakeholders both externally and within Ministry business areas. Regular meetings occurred at executive levels with external stakeholders, within Ministry business areas and with multiple governance bodies. Business stakeholders were represented in NRPP Leadership, Steering Committee and Project Board forums.</p> <p>To improve on this model and improve both engagement and ownership, a reconstituted and redirected Leadership Team refocused executive level discussions to business impacts, project value and priority setting, and product owners were identified for specific applications.</p> |
| <p>Are the interests of all key stakeholders aligned? If not, has the project team identified where they differ and developed a strategy to resolve conflicts?</p>               | <p>Through portfolio and program-level governance structures, the approach to resolving alignment conflicts was established. As part of their on-going engagement activities, project teams completed thorough reviews of individual project stakeholder alignment issues and enacted plans to resolve those that occurred. Unresolved issues were escalated and resolved through the project governance. The support of the ADM Steering Committee and DM Project Board was used to maintain alignment, however, some alignment issues were present at all levels and persisted throughout the term of NRPP</p>  |
| <p>Have users and senior management been adequately involved in the design and testing of the system, and signed off their acceptance?</p>                                       | <p>Client-centric user design was actively employed and the participation of business areas in testing was improved over the term of the project. A series of project stage gates ensured appropriate senior-level involvement and sign-off at key stages of constituent projects, including design and testing. Moving to a common component methodology highlighted challenges of group ownership of some deliverables. Alignment on direction from</p>   |

| Best Practice  | NRPP Approach   |
|--|---|
|  | governance was incomplete in some cases, leading to some mistrust of the process to determine the outcome of escalated issues.  |
| <b>GOVERNANCE</b>  |   |
| Do those tasked with oversight have a clear understanding of their organization's and government's overall IT vision, priorities, strategies and funding constraints?      | Oversight for NRPP was provided by a Project Board and Steering Committee made up of Deputy Ministers and ADMs from across the Natural Resource Ministries and participants such as the OCIO. All governance bodies had a clear understanding of their organization's and government's overall IT vision, priorities, strategies and funding constraints.   |
| Do those tasked with oversight have a clearly defined role and do they have the capacity and independence to monitor the achievement of benefits from IT-enabled projects? | Terms of reference for key decision-making forums were documented and agreed to by their respective committees. Each of the governance bodies for NRPP contained some members from outside the NRMs. Multiple funding paths for IMIT capital through different Boards led to some confusion about how to best pursue support for new projects.  |
| Has the organization taken a corporate-wide approach to prioritize individual IT investments relative to its objectives, priorities and constraints?                       | There were different funding paths for projects within NRPP than for projects outside the scopes of the project. This led to confusion about how best pursue support for new projects. An IMIT Investment Board was instituted to prioritize IMIT expenditures and consolidate delivery mechanisms within a single division; the process for prioritization is subject to ongoing review and improvement. |
| Are those tasked with oversight provided with reliable information on a timely basis so they can exercise their oversight responsibilities?                                | NRPP Project Board and Steering Committee met monthly and received status reports prepared by a dedicated Portfolio Management Office, drawing on regular reporting from constituent projects. IMIT Capital Investment board, OCIO and Treasury Board staff received quarterly status   |



| Best Practice  | NRPP Approach   |
|--|---|
|  | updates. However, an external review raised concerns about the accuracy and timeliness of these reports.  |
| Is it clear who is responsible and accountable for the success of the project?                                     | The Project Board (and its chair) was accountable to ministers for the success of the project. The MCIO and ADM IIT, together with Executive Director, NRPP were responsible for successful completion of the project.  |
| What is the organization's track record in managing other investments of the same size and complexity?             | NRPP was the largest business transformation project in the recent history of the NRMs. The project team sought out lessons learned from other large technology project within the NRMs, and from change projects such as the social sector's Integrated Case Management project. The annual operating budget of the ministries exceeds the total value of this project by an order of magnitude. |
| Are those tasked with oversight prepared to step in and cancel or substantially alter projects if the need arises? | The Project Board demonstrated a willingness to cancel, defer or significantly alter several projects. This was particularly evident during the 2018 pivot when some projects were paused due to resource constraints in the ministries.  |

## Appendix E – Summary of NRPP Benefits Realized

**Table 11 – NRPP Commitments and Benefits Realized**

| Commitment                                      | Status, April 2019   |
|---|--|
| Increased revenue to NRM and broader government | <ul style="list-style-type: none"> <li>• The technology platform enables more online and digital application processes for authorization and the ability to pay online, which increases efficiencies in fee collection.               <ul style="list-style-type: none"> <li>◦ Revenue from license sales and limited entry hunting tags has increased.</li> <li>◦ Staffing costs to manage the program have decreased.</li> <li>◦ In one month in 17/18 more revenue was generated from digital licenses than in all 16/17.</li> </ul> </li> <li>• NR Online Services provides easier access to information about investment opportunities.</li> <li>• NR Online Services fosters consistency throughout the province for authorization processes.               <ul style="list-style-type: none"> <li>◦ e.g. there are currently 23 different ways for a proponent to obtain the same cutting permit; at the end of implementation there will be only one way.</li> </ul> </li> <li>• Industry is applauding the consistency, efficiency and ease of access. Their costs are reduced because they no longer have to employ regional specialists to navigate the system and work with government.</li> </ul> |
| Increased access to NRS information             | <ul style="list-style-type: none"> <li>• The technology platform provides access to data and information from various disparate systems in one place for public use.</li> <li>• The public has more access and visibility into restrictions or previous authorized uses of the land – giving an applicant an indication of how this might impact a request prior to the formal process.               <ul style="list-style-type: none"> <li>◦ e.g. if the land is designated as a park the proponent will know this before applying for a permit that will ultimately not be approved.</li> </ul> </li> <li>• The technology platform provides increased access, efficiency and quality decisions in the process and signing of common program agreements for the sector.               <ul style="list-style-type: none"> <li>◦ e.g. staff in different programs couldn't previously access information to make decisions if it was in another system. This is now possible.</li> </ul> </li> </ul>  |
| Increased transparency                          | <ul style="list-style-type: none"> <li>• Proponents can track applications through the life cycle of the application process</li> </ul>  |

| Commitment  | Status, April 2019   |
|---|--|
| and certainty in the decision-making process  | <ul style="list-style-type: none"> <li>• The technology platform provides access to the same information about investment opportunities that staff will use in making their determinations</li> <li>• A modernised public review and comment system for Crown Lands provides more accessible information on land usage applications and the ability to provide input to government staff</li> </ul>  |
| Reduced duplication in process  | <ul style="list-style-type: none"> <li>• The technology platform fosters consistency throughout the province for various authorization processes. <ul style="list-style-type: none"> <li>◦ Ways to obtain a cutting permit will be reduced from 23 to a single way.</li> </ul> </li> <li>• Previously there were 5 different regions in the Mines ministry, each with its own approach to obtaining an exploration permit. This has been reduced to a single, common application process across all five regions.</li> </ul>   |
| Improved management and efficiency of natural resource activities, including cumulative effects | <ul style="list-style-type: none"> <li>• For decisions with multiple decision makers, the decision-making process is automated, which allows all decision makers to review and make determinations concurrently as opposed to sequentially - decisions are made faster.</li> <li>• The technology platform allows for better balancing of workload throughout the province. <ul style="list-style-type: none"> <li>◦ e.g. if one regional office is overloaded another office can easily support them because all of the information is online. Prior to implementation, this process was paper-based and to share workload involved boxing and shipping paper to other locations.</li> </ul> </li> <li>• Agreed set of resource values that statutory decision makers can take into consideration before making a decision. The system will allow all decision-makers access to the same set of agreed upon cumulative effect value sets.</li> <li>• The Public Review and Comment service provides a single point of public access to real-time application information for Crown Lands authorizations.</li> </ul> |
| Enhanced relationships and social licence with industry, First                                  | <ul style="list-style-type: none"> <li>• Improving industry relationships through enhanced consistency, increased access and streamlined process and enhanced technical capabilities (paying online, one client Id, digital document submissions).</li> <li>• Improving relationships with First Nations by moving to activity-based applications instead of authorization-by-authorization.</li> </ul>  |

| Commitment  | Status, April 2019   |
|---|--|
| Nations and citizens  | <ul style="list-style-type: none"> <li>○ e.g. Consulting on a full activity-based bundle rather than on individual components streamlines and makes the consultation process less intensive and time consuming for First Nations, reducing consultation fatigue.</li> </ul>  |
| Integrated tech. foundation that will support future NRS business | <ul style="list-style-type: none"> <li>• The technology platform immediately promotes client centered design and integrated statutory decision making on land usage (permits, renewals, tenures, authorizations).</li> <li>• Through the use of common services and client profiles linked across the NRM, the platform enables client centered design for all NRM services in a more cost-effective way</li> <li>• The platform replaces aging and unsustainable legacy systems.</li> <li>• The platform implements a Service Oriented Architecture which supports more manageable and less expensive continuous infrastructure modernization</li> <li>• Using standardized Application Programming Interface (API) to combine technical capabilities to build services means that the underlying capabilities can be replaced with considerably less effort and disruption.</li> </ul> |

**NRPP**  
**Write-Down Summary**  
**As at March 31, 2019**

## Write-Down of Capital Costs - NRPP

| WRITE-DOWN ANALYSIS                            |                                  |                        |                                |   |
|--|----------------------------------|------------------------|--------------------------------|---|
| Asset  | Estimated Cost at March 31, 2019 | Write-Down / Write-Off | Revised Cost at March 31, 2019 | Justification   |
| Mobile Enablement                              | 269,218                          | 269,218                | -                              | Completed, not implemented - no plan to do so. 100% write-down.   |
| Operational Spatial Temporal Database (OSDB)   | 5,654,996                        | 839,869                | 4,815,127                      | Database implemented. Temporality functionality not achieved - that portion written down.   |
| Common Finance                                 | 5,050,418                        | 2,525,209              | 2,525,209                      | Implemented - Reduced/changed scope. 50% write-off of early phases of project.  |
| NRS Online Services Foundation                 | 6,115,824                        | 1,528,956              | 4,586,868                      | Implemented - Reduced/changed scope. 25% write-down of early phases of project.   |
| NRS Document Management Service                | 3,676,680                        | 919,170                | 2,757,510                      | Implemented - Reduced/changed scope. 25% write-down of early phases of project.   |
| NRS Revenue & Receivables Mgmt                 | 3,544,730                        | 3,544,730              | -                              | No plan to complete as per CSNR for all TB Options. 100% write-down.  |
| Business Transformation Definition             | 3,640,928                        | 546,139                | 3,094,789                      | Spend doesn't match end value of product. 15% write-down for some unused aspects of project in early stages.  |
| Occupant License To Cut                        | 3,115,803                        | 1,557,902              | 1,557,902                      | Implemented. Some functionality not achieved. 50% write-down as policy changes needed to enable full project not acted on.  |
| Cutting Permits                                | 2,112,548                        | 1,033,714              | 1,078,834                      | Implemented - Reduced/changed scope. ~50% write-down as full vision of initial project scope not realized.  |
| Water Name Change                              | 338,804                          | 338,804                | -                              | Not implemented. 100% write-down as no plan to complete.  |
| Private Timber Marks                           | 401,161                          | 401,161                | -                              | Not implemented. 100% write-down as no plan to complete.  |
| Notice of Work Bundle (NoW)                    | 14,250,685                       | 3,562,671              | 10,688,014                     | Implemented - Reduced/changed scope. 25% write-down of early phases of project.   |
| Range  | 2,597,827                        | 857,283                | 1,740,544                      | Implemented - Reduced/changed scope. Some functionality not achieved - Salesforce effort. 25% write-down.   |
| Mountain Resort Development Implementation     | 464,051                          | 464,051                | -                              | No plan to complete. 100% write-down.   |
| Crown Lands Re-Platforming                     | 1,784,787                        | 356,957                | 1,427,830                      | Project completed - Reduced/changed scope. Implementation expected next fiscal, plans being finalized. 20% write-down of early phases of project.                                 |
| Crown Lands Process Standardization            | 75,996                           | 75,996                 | -                              | No plan to complete. 100% write-down.   |
| Crown Lands Robotic Process Automation         | 760,736                          | 760,736                | -                              | No plan to complete. 100% write-down.   |
| Archaeology                                    | 1,550,056                        | 1,329,231              | 220,825                        | Reduced/changed scope. Write down all work prior to this fiscal due to early project scope/definition issues leading to a reset in 2018/19. Project in progress for 2019 release. |
| Crown Lands Transformation Implementation      | 2,354,252                        | 1,071,185              | 1,283,068                      | Project in final stages. Reduced/changed scope. ~50% write-down of early stages of project.   |
| Oracle Consulting                              | 422,128                          | 211,064                | 211,064                        | Functionality not achieved. 50% write-down for work related to OSDB temporality functionality.  |
| Integrated Systems & Services Strategy Phase 1 | 2,929,668                        | 976,555.83             | 1,953,112                      | Implemented. Reduced/changed scope. 33% write-down of early phases of project.  |
| <b>TOTAL</b>                                   | <b>\$ 61,111,296</b>             | <b>\$ 23,170,601</b>   | <b>\$ 37,940,694</b>           |   |



## Appendix B

s.12

Page 278 of 278

Withheld pursuant to/removed as

s.12



# **NRPP IT Risk Assessment and Review**

## **Statement of Work – Information, Innovation and Technology Division (IS19IIT068SOW)**

**Date: May 31, 2019**

**PREPARED BY:** MNP LLP  
2200 – 1021 West Hastings Street  
Vancouver, BC V6E 0C3

**MNP CONTACT:** Peter Guo  
Partner, BC Enterprise Risk Services Leader

**PHONE:** 604.637.1513

**FAX:** 604.685.8594

**EMAIL:** [peter.guo@mnp.ca](mailto:peter.guo@mnp.ca)

**CONFIDENTIAL** – This document contains confidential and proprietary information that is protected and distribution is restricted. Except as expressly authorized in writing by MNP LLP, the holder shall not reproduce or make available the information to other parties and distribution is restricted to those authorized personnel with a need to know.



## CONTENTS

|  |    |
|--|----|
| EXECUTIVE SUMMARY .....  | 3  |
| DETAILED REPORT .....  | 6  |
| Background .....   | 6  |
| Scope .....  | 6  |
| Engagement Approach .....  | 7  |
| Limitations .....  | 7  |
| Summary and Conclusion .....   | 8  |
| Detailed Findings and Recommendations .....                            | 10 |
| Acknowledgement .....  | 21 |
| Appendix A – Summary of Treasury Board Submissions and Approvals ..... | 22 |
| Appendix B – STAKEHOLDER CONSULTATIONS .....                           | 23 |
| Appendix C – DOCUMENTS REVIEWED .....                                  | 24 |

### Limitation of Use

This report is intended solely for the information and use of the Ministry of Environment and Climate Change Strategy, Information, Innovation and Technology Division. This report should not be distributed to third parties without MNP LLP's written consent. Any use that a third party makes of this report, and any reliance or decisions made based on it, are the responsibility of such third party. MNP LLP accepts no liability or responsibility for any loss or damages suffered by any third party as a result of decisions made or actions taken based on this report.

## EXECUTIVE SUMMARY

Over the last five years, the Natural Resource Permitting Project (NRPP) embarked on ambitious plans to provide enhanced services across the Natural Resources Ministries (NRMs) to enable integrated decision-making, data visibility and information clarity. In retrospect, NRPP was too ambitious as the initial Treasury Board request for almost \$300 million in funding was not approved (only \$20 million was approved), and it became quickly evident that the legislative changes that had to be made were not forthcoming. In fiscal 18/19, a decision was made to wind down NRPP and consolidate NRPP with IMB into the new Information, Innovation and Technology Division (IITD) within the Ministry of Environment and Climate Change Strategy.

As part of the activities undertaken for an orderly closure of NRPP, IITD develop a detailed plan to assess the various NRPP projects and technical solutions, and develop an approach to continue development, provide support or discontinue work. As part of this planning, the various NRMs product owners were informed and consulted to ensure that they could also prepare themselves for NRPP's close out at March 31, 2019.

During this orderly wind down, significant improvements were implemented within IITD at the project level, resulting in detailed interactions and transition planning with the NRMs, and improved reporting and governance. The end result is a current state at the end of fiscal 2019 that has most transition plans completed, and specific actions and budgets in place for ongoing maintenance in various NRMs.

IITD commissioned an IT Risk Assessment and Review and MNP LLP (MNP) was the successful proponent in the procurement. The scope of our work included:

- i. Reviewing previous third-party consultants' NRPP health check reports and assessing the completeness of execution of recommendations and documented action plans.
- ii. Reviewing a sample of NRPP documents provided by IITD and through interviews assessing:
  - a. Governance structures and effectiveness, including decision-making authorities and information support for decision-making;
  - b. Funding decisions and practices and impact on NRPP key decisions; and
  - c. NRPP benefits realization and alignment to risk management and scope management.

In completing our assessment from March through April 2019, we noted a number of observations and have provided recommendations to address these issues. Our detailed report that follows separates the recommendations into items that arose during the initiation of NRPP; while it was in-flight; or those at close-out and currently impact IITD. We also note that all of our observations and recommendations identified from the initiation and in-flight periods would be important for any major IT project. As such, we repeat them for learnings that should be considered and implemented for future IT transformations.

It is our view that working on the current recommendations will ensure that remaining tasks from the close out of NRPP are completed and that key risks in the transition of various technical solutions with various NRMs product owners are effectively mitigated. In the future, the recommendations for new transformation efforts should assist IITD, and perhaps other Government entities, set up large projects for more positive outcomes. (Please note that the numerical references for the recommendations align to the discussion in the detailed report and are presented for ease of reference.)

### **Initiation and In-flight Recommendations**

- 1.2 For future IT transformations, a defined series of project health checks should be initiated at the outset of the transformation. Health checks should correspond to key project milestones, gates and/or risks identified during the lifecycle of the project. The supplier of the series health checks should be independent from the vendors of project management office, technical work delivery and key Government stakeholders.
- 2.1 A senior executive should be assigned responsibility for any major IT transformation initiatives. A clear mandate and agreed-upon roles and responsibilities for this leader should be documented and communicated with key stakeholders.
- 2.2 Governing bodies for large IT transformations should include some experienced leaders who have undertaken similar projects in their career. Defining required skillsets and competencies at project initiation, and actively seeking to fill those roles should be an important prerequisite for project approval.

- 2.3 Clear information gathering and project reporting criteria, tools and timelines should be defined for each governance level for large IT transformation projects prior to initiation. Critical to this is developing a robust and comprehensive business case with a defined benefits realization framework and proposed benefits and measures. These reporting items should be revisited periodically during the lifecycle of a transformation and adjusted as required.
- 3.1 In future transformation projects, a material shortfall in approved funding should necessitate an immediate revision of the business case and its key components.
- 3.2 Future transformation project budgets should contain both Cap Ex and Op Ex requests to ensure that there is clear delineation, from the outset, of what funding is available for building the transformation solution and what allocations are required for transition, stabilization and future ownership/stewardship.
- 3.3 Risk-managed funding should be avoided as much as possible in future transformation projects.
- 4.1 For future transformations, a benefits realization framework must be established at the project initiation stage. Recruiting appropriate resources and establishing baseline information are crucial activities at project initiation.
- 4.2 For future transformation projects, benefits realization should be deployed as a vital tool for project, scope, risk and change management throughout the project lifecycle. Benefits realization should be standing agenda items for project governance committees.
- 4.3 The responsibility for benefits realization should be independent of project management and technical/business delivery.

### **Current Recommendations**

- 1.1 IITD should review the status of all previous third-party recommendations to ensure the current status has been reported accurately, appropriate action to address outstanding issues has/is being undertaken, and supporting documentation has/is being compiled and completed.
- 1.3 IITD should complete the project close out report to Project Board currently underway that captures key wins, challenges, mistakes and lessons learned with relevant recommendations for future IT transformations. It is further suggested that this report be shared with the NRMs and OCIO.
- 2.4 Consideration around further clarifying vision and objectives should be given to more completely enable wind-down and hand-off with project owners. Messaging from Project Board should be broadly communicated with product owners, NRMs and relevant governance bodies.
- 3.4 Working with IITD, product owners should continue to discuss and agree on detailed project transition plans, accompanied by funding requests or transfers from IITD, to allow clients to assume responsibility for completion and implementation of each project. The completeness and execution of these plans should be reported through the NRMs and to the ADMs and DMs in charge of governance.
- 4.3 The responsibility for benefits realization should be independent of project management and technical/business delivery.

### **Future Transformation Project Recommendations** (same as Initiation and In-flight)

- 1.2 For future IT transformations, a defined series of project health checks should be initiated at the outset of the transformation. Health checks should correspond to key project milestones, gates and/or risks identified during the lifecycle of the project. The supplier of the series health checks should be independent from the vendors of project management office, technical work delivery and key Government stakeholders.
- 2.1 A senior executive should be assigned responsibility for any major IT transformation initiatives. A clear mandate and agreed-upon roles and responsibilities for this leader should be documented and communicated with key stakeholders.
- 2.2 Governing bodies for large IT transformations should include some experienced leaders who have undertaken similar projects in their career. Defining required skillsets and competencies at project initiation, and actively seeking to fill those roles should be an important prerequisite for project approval.
- 2.3 Clear information gathering, and project reporting criteria, tools and timelines should be defined for each governance level for large IT transformation projects prior to initiation. Critical to this is developing a robust and comprehensive business case with a defined benefits realization framework and proposed benefits and measures. These reporting items should be revisited periodically during the lifecycle of a transformation and adjusted as required.

- 3.1 In future transformation projects, a material shortfall in approved funding should necessitate an immediate revision of the business case and its key components.
- 3.2 Future transformation project budgets should contain both Cap Ex and Op Ex requests to ensure that there is clear delineation, from the outset, of what funding is available for building the transformation solution and what allocations are required for transition, stabilization and future ownership/stewardship.
- 3.3 Risk-managed funding should be avoided as much as possible in future transformation projects.
- 4.1 For future transformations, a benefits realization framework must be established at the project initiation stage. Recruiting appropriate resources and establishing baseline information are crucial activities at project initiation.
- 4.2 For future transformation projects, benefits realization should be deployed as a vital tool for project, scope, risk and change management throughout the project lifecycle. Benefits realization should be standing agenda items for project governance committees.
- 4.3 The responsibility for benefits realization should be independent of project management and technical/business delivery.

We wish to gratefully acknowledge the assistance and cooperation of IITD, NRMs and other Government executives and personnel during the completion of this assignment.

# DETAILED REPORT

## Background

British Columbia's Natural Resource Ministries (NRMs) are the stewards of the Province's Crown lands and natural resources which reflects the diverse values and interests of all British Columbians.

In FY14/15, the Natural Resource Permitting Project (NRPP) with its many concurrent initiatives commenced. During its 5-year lifecycle, NRPP, with direct support from the Natural Resource Transformation Secretariat (NRTS) and the Information Management Branch (IMB), undertook a series of planning, innovation, implementation iterations as part of the Provincial Government's commitment to reduce red tape for British Columbia by streamlining and simplifying processes to make it easier and faster to access services at the various NRMs. Through the NRPP, citizens and businesses were to have a clear picture of what B.C.'s crown lands and resources were being used for and what it could be used for in the future.

Since inception, a number of challenges arose that made it difficult to fully realize the initial transformative and integrated vision of NRPP. For example, initial funding submissions were not approved to the extent requested. In addition, recruited staff as well as onboarding of certain NRMs to NRPP varied greatly in terms of level of engagement.

In early 2018, the decision was made to close down NRPP (at March 31, 2019) and consolidate legacy NRPP and IMB groups under the leadership of a single Assistant Deputy Minister (ADM) into the Information, Innovation and Technology Division (IITD). Since that time, IITD has commenced an orderly process to identify projects that will continue past March 31, 2019, as well as those that will be discontinued. IITD has engaged with various product owners in the NRMs to identify requirements and responsibilities related to continuing and discontinuing specific projects. Moving forward, IITD is providing leadership for information management/information technology (IM/IT), planning, policy and business process solutions, and is also the single authority for all information and technology across the NRMs.

As part of the close out of NRPP, IITD identified a need to perform an IT risk assessment and review, and selected MNP LLP (MNP) as its service provider to conduct this assessment.

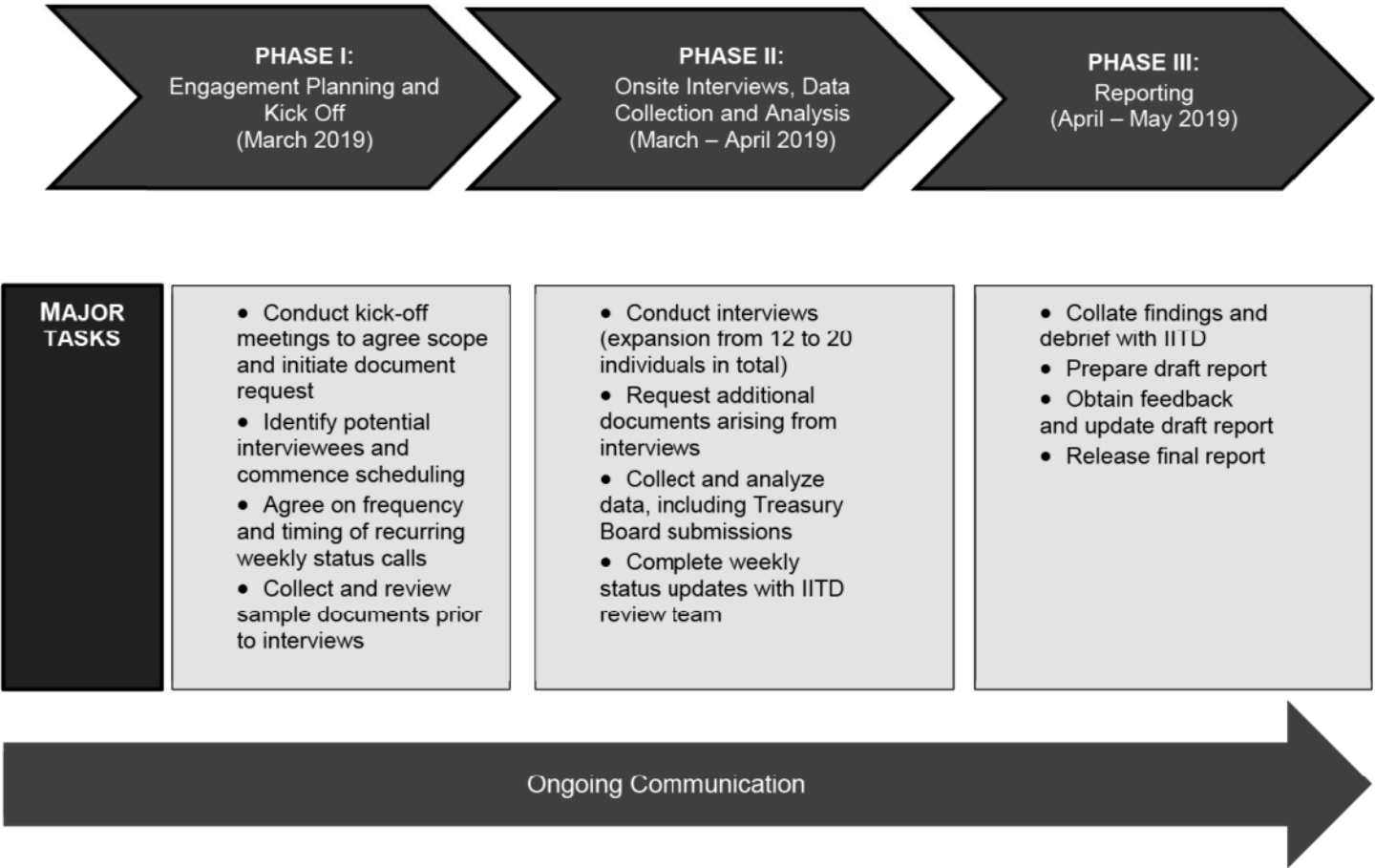
## Scope

The scope discussed and agreed with IITD included:

- i. Reviewing previous third-party consultants' NRPP health check reports and assessing the completeness of execution of recommendations and documented action plans.
- ii. Reviewing a sample of NRPP documents provided by IITD and through interviews assessing:
  - a. Governance structures and effectiveness, including decision-making authorities and information support for decision-making;
  - b. Funding decisions and practices and impact on NRPP key decisions; and
  - c. NRPP benefits realization and alignment to risk management and scope management.

# Engagement Approach

To conduct the risk assessment, MNP used the following three-phase approach, which included the following activity.



## Limitations

Our work was planned and conducted to identify and assess key risks and make recommendations for improvement. Our work and findings do not in any way constitute advice or recommendations (and we accept no liability in relation to any advice or recommendations) regarding any commercial decisions. The work we performed did not constitute an audit examination or any assurance engagement under the standards of the Chartered Professional Accountants of Canada (“CPA Canada”), or any professional standards body, and hence no opinion, attestation or other form of assurance is provided or implied.

Our work was not designed to identify and cannot necessarily be expected to disclose defalcations, fraud and other irregularities. As a result, this report does not necessarily include all those matters, which a more extensive or special examination might develop. Irregularities discovered through the course of our review would be reported to you. However, the absence of a reported irregularity should not be interpreted as an opinion regarding the efficacy of the control or non-existence of such defalcations, fraud or other irregularities.

Our work was conducted based on the assumption that information provided to us by IITD and the NRMs’ project teams was reliable, accurate and complete. We did not subject the information to checking or verification procedures except to the extent expressly stated. In no circumstances shall we be responsible for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by management and employees of IITD or any other person of whom we may make enquiries.

## Summary and Conclusion

As NRPP has been discontinued effective the end of last fiscal, we summarize our recommendations in terms of those that arose during initiation; those that arose in-flight; and those that are evident as NRPP goes through close out and can assist IITD move into the future. These sets of recommendations can help inform current product owner-facing activities, as well as assist in the completion of a project closure report. In the longer run, the recommendations for consideration for future IT transformation projects should enable IITD and broader Government entities to set up such projects with stronger governance, enhanced project and risk management, and robust benefits realization capabilities.

| Recommendation   | Initiation, In-flight<br>Current or Future<br>Project<br>Considerations |
|--|---|
| <b>Third Party Consultants' Reports</b>  |   |
| 1.1 IITD should review the status of all previous third-party recommendations to ensure the current status has been reported accurately, appropriate action to address outstanding issues has/is being undertaken, and supporting documentation has/is being compiled and completed.   | Current   |
| 1.2 For future IT transformations, a defined series of project health checks should be initiated at the outset of the transformation. Health checks should correspond to key project milestones, gates and/or risks identified during the lifecycle of the project. The supplier of the series health checks should be independent from the vendors of project management office, technical work delivery and key Government stakeholders.                                     | Initiation, In-flight,<br>Future  |
| 1.3 IITD should complete the project close out report to Project Board currently underway that captures key wins, challenges, mistakes and lessons learned with relevant recommendations for future IT transformations. It is further suggested that this report be shared with the NRMs and OCIO.   | Current   |
| <b>Effectiveness of Governance Structures</b>  |   |
| 2.1 A senior executive should be assigned responsibility for any major IT transformation initiatives. A clear mandate and agreed-upon roles and responsibilities for this leader should be documented and communicated with key stakeholders.  | Initiation, In-flight,<br>Future  |
| 2.2 Governing bodies for large IT transformations should include some experienced leaders who have undertaken similar projects in their career. Defining required skillsets and competencies at project initiation, and actively seeking to fill those roles should be an important prerequisite for project approval.   | Initiation, In-flight,<br>Future  |
| 2.3 Clear information gathering, and project reporting criteria, tools and timelines should be defined for each governance level for large IT transformation projects prior to initiation. Critical to this is developing a robust and comprehensive business case with a defined benefits realization framework and proposed benefits and measures. These reporting items should be revisited periodically during the lifecycle of a transformation and adjusted as required. | Initiation, In-flight,<br>Future  |
| 2.4 Consideration around further clarifying vision and objectives should be given to more completely enable wind-down and hand-off with project owners. Messaging from Project Board should be broadly communicated with product owners, NRMs and relevant governance bodies.  | Current   |
| <b>Funding Decisions and Practices: Impact on NRPP Decisions</b>   |   |
| 3.1 In future transformation projects, a material shortfall in approved funding should necessitate an immediate revision of the business case and its key components.  | Initiation, In-flight,<br>Future  |
| 3.2 Future transformation project budgets should contain both Cap Ex and Op Ex requests to ensure that there is clear delineation, from the outset, of what funding is   | Initiation, In-flight,<br>Future  |

|  |  |
|--|--|
| available for building the transformation solution and what allocations are required for transition, stabilization and future ownership/stewardship.   |  |
| 3.3 Risk-managed funding should be avoided as much as possible in future transformation projects.  | Initiation, In-flight, Future          |
| 3.4 Working with IITD, product owners should discuss and agree on detailed project transition plans, accompanied by funding requests or transfers from IITD, to allow clients to assume responsibility for completion and implementation of each project. The completeness and execution of these plans should be reported through the NRMs and to the ADMs and DMs in charge of governance. | Current                                |
| <b>NRPP Benefits Realization: Alignment to Risk and Scope Management</b>   |  |
| 4.1 For future transformations, a benefits realization framework must be established at the project initiation stage. Recruiting appropriate resources and establishing baseline information are crucial activities at project initiation.   | Initiation, In-flight, Future          |
| 4.2 For future transformation projects, benefits realization should be deployed as a vital tool for project, scope, risk and change management throughout the project lifecycle. Benefits realization should be standing agenda items for project governance committees.   | Initiation, In-flight, Future          |
| 4.3 The responsibility for benefits realization should be independent of project management and technical/business delivery.   | Initiation, In-flight, Current, Future |

In the sections that follow, we provide our detailed observations, discussion and recommendations for management's consideration and action.



## Detailed Findings and Recommendations

### **1. Third Party Consultants' Reports**

#### **Issues:**

- Concerns were expressed regarding the completeness of action plans and status reports from previous third-party consultants' reports.

#### **Risk(s):**

- Decisions may be made based on a misunderstanding of the actual status of action plans in relation to highlighted issues from previous third-party reports.
- Future audits may reveal incompleteness of action plans.

#### **Observation(s) and Discussion:**

Consistent with good practice, a number of third-party reviews were conducted at intervals throughout the project with resulting issues and recommendations documented from such reviews. Subsequently, detailed status reports were prepared by NRPP in response to those third-party recommendations to track and report progress.

We followed up on the status of certain action plans and observed that most were complete. There was documentation for most of these items to support closure on the recommendations. For example, the segregation between project management and technical work package delivery from the KPMG 2017 report, has been achieved through re-aligning certain vendor contracts. Furthermore, the new organizational structure of IITD clearly separates PM from technical work from benefits realization. In general, there is evidence of good effort to address the recommendations from previous consulting reports, and the outcomes have had a positive effect.

During the course of our interviews, concerns were expressed relating to the reliability of the information provided in certain status reports. In some instances, we found varying degrees of completeness as well as in details in the supporting documentation.

For example, the alignment of NRPP governance with sector accountability that was raised by KPMG in 2017 was partially actioned. Revisions to the terms of reference for the Project Board were developed and actioned. Some of these changes were designed to create greater clarity (e.g., the inclusion of a roles and responsibilities, RACI, matrix), as well as provide updates due to organizational changes (e.g., creation of IITD and assumption of positions by new individuals). The Leadership Team terms of reference was also updated. Key impacts from this revision was to give the NRMs' representatives enhanced influence, as well as defining the role of the project steering committees in relation to the Leadership Team.

We observed two updates to the Project Board terms of reference, however they were partially complete and were not later updated for changes in the membership of the NRPP Project Board on a timely basis. It should be noted that the later revision in August 2018 was acknowledged by in certain interviews to have had greater impact and clarity, which is consistent with the enhanced focus and execution that was associated with the wind-down of NRPP.

Another example is the multiple attempts to develop and embed a benefits realization framework. We were shown four separate attempts, from the initial business case and Treasury Board submission, to the latest version that is accompanying the NRPP closure and IITD transition. From our review of supporting documents and interviews, it appears that the earlier iterations for benefits realization were not embedded into NRPP.

It is noteworthy that the latest attempt at benefits realization has had a focus on the projects that IITD will continue. As part of this, greater focus has been brought to bear on such projects, and this refreshing change has helped product owners identify the appropriate metrics to assess benefits. Good effort has been expended through providing product owners, through collaborative assessment of their projects and objectives, with better clarity, process and metrics in this latest iteration.

It is debatable whether this item is truly complete at this point, and it will take some time to see how well the process and metrics are adopted and yield insight into actual benefits achieved. (For more discussion on benefits realization, please see the corresponding section later in this report.)

From the Gartner report in 2018, an orderly transition plan was to be developed for the close out of NRPP. The plan was presented to the Steering Committee and Project Board for comment and input. It was acknowledged through interviews that detailed planning sessions between IITD and NRMs' product owners have been completed to "flesh out" transition plan and the requisite activities based on the agreed-upon decision on specific products.

This item was marked completed at March 2019, and a recent IITD update presentation indicates that the majority of actions are indeed complete. However, there are still items that are in progress, and from our interviews with certain product owners, we note that not every one of them feel comfortable that they have a strong understanding of required responsibilities, operating model that should be developed between them and IITD, or funding approved to enable the transition. Although this can somewhat be anticipated given the large undertaking that was NRPP, and the significant challenge of detailed planning and execution for wind-down, there are still some pockets of uncertainty and some activities with product owners and within IITD that are not fully complete.

We believe that a fulsome inventory and assessment of the status of all third-party consultants' reports and their related recommendations should be conducted. Through this exercise, IITD will be able to identify any items warranting additional resources or attention; assign responsibilities and create updated timelines for completion; and compile the required documentation to support closure of all third-party consultants' recommendations.

As noted earlier, a good practice in project oversight and governance is to conduct a series of project health checks during its lifecycle. We understand that at least five separate reports (PWC 2014, PWC 2015, KPMG 2017, Burton 2017 and Gartner 2018) were completed. Although these were not commissioned on a regular cycle, they nevertheless added value to NRPP during various stages of its development. We suggest that in future large initiatives, that a series of project health checks be identified and included as part of the project roll-out, and that they are embedded early in the project gating and approval process, as well during development and deployment. The costs of these health checks should be included in the budget, and an independent supplier (separate from the contracted project management and technical delivery firm(s)) should be engaged for this series of reviews. To the extent possible, the selected supplier should also be independent from the Government's transformation project leadership.

In order to produce an orderly inventory, as well as capture additional lessons learned for IITD and future large Government technology transformations, a fulsome project closure report should be commissioned. Building from this risk assessment and the previous third-party project health checks, the project closure report would capture the key wins, challenges, mistakes and lessons learned with relevant recommendations for future IT transformations. The project closure report would be a key document for IITD and the NRMs, and may be shared with the OCIO, Treasury Board and Office of the Auditor General (OAG). This is a leading practice that is a capstone that often goes over and above the project health checks described previously.

**Recommendation(s):**

- 1.1 IITD should review the status of all previous third-party recommendations to ensure the current status has been reported accurately, appropriate action to address outstanding issues has/is being undertaken, and supporting documentation has/is being compiled and completed.
- 1.2 For future IT transformations, a defined series of project health checks should be initiated at the outset of the transformation. Health checks should correspond to key project milestones, gates and/or risks identified during the lifecycle of the project. The supplier of the series health checks should be independent from the vendors of project management office, technical work delivery and key Government stakeholders.
- 1.3 IITD should complete the project close out report to Project Board currently underway that captures key wins, challenges, mistakes and lessons learned with relevant recommendations for future IT transformations. It is further suggested that this report be shared with the NRMs and OCIO.

## **2. Effectiveness of Governance Structures**

### **Issues:**

- **Clarity of executive accountability for NRPP was challenging during the course of its lifecycle. The absence of an immediate change in business case and changes in key roles exacerbated this issue.**
- **Information flow for NRPP updates and reporting from the PMO through to the Deputy Ministers' Project Board varied over time and was not always effective for oversight and decision-making.**
- **Composition of various levels of governance bodies did not always include sufficient IT transformation experience.**
- **Leading practice for independent periodic project assessments to assist with clarifying information flow, assessing risks and defining mitigating actions was not established at the outset.**
- **A continued focus, reiteration and reference to the original NRPP vision currently exists without clarity as to the practicality and ability to still achieve that vision, or if there are revised objectives, as NRPP was discontinued. This is in contrast to the reality that NRPP closed down effective end of last fiscal.**

### **Risk(s):**

- **Unclear accountability resulted in difficulty in defining roles and diluted immediacy of required actions.**
- **Reduction in, or limited information flow for oversight, risk assessment, scope management and decision-making.**
- **Projects may be stranded in the absence of agreed project ownership transition, including budgets for transition, operations and maintenance.**
- **Investment in NRPP may be lost where common NRPP platforms not used. Potential for duplication where new platforms built to individual client specifications.**
- **IT-led transition instead of client-led.**
- **Unclear communication of original versus current vision and objectives create potential confusion and lingering reluctance that may inhibit the transition of NRPP projects to operational sustainment and stability.**

### **Observation(s) and Discussion:**

During the course of our interviews we heard repeatedly that there was a perceived absence of defined executive leadership. There appear to be several contributing factors to this issue. When the initial business case was submitted for approval to the Treasury Board, the request was for almost \$300 million. The Treasury Board ultimately approved \$20 million for NRPP. At that time the necessity to immediately re-visit the business case, along with the proposed business benefits for NRPP, to appropriately reflect the modest approved amount did not occur. It is uncertain why this critical revision was not directed by the NRMs' executive or the NRPP Project Board or Project Steering Committee. Without a significant revision of the NRPP business case, a downward scaling and recast of timeline for project development and delivery, as well as a reduction in the mobilization of resources, did not occur. Almost concurrently, there did not appear to be an appetite for certain legislative changes that would have enabled the delivery of the original NRPP vision. Both of these factors should have been "red flags" at that time and signalled the need for strong oversight and executive intervention.

There were a number of Assistant Deputy Ministers and Deputy Ministers that led the various NRMs that were engaged during the development of the business case, and subsequently had a role on the Project Steering Committee or the Project Board. With the previously mentioned lack of full funding approval, what evolved was a focus on FLNRO projects and the leadership of those through that ministry's Deputy Minister (who also sat on both Project Board and DMCNR). Concurrently, the Project Board was chaired by the Deputy Minister of another Ministry.

A further complication was the fact the Project Board owned the capital budget for NRPP, however operating funding was obtained from the individual NRMs which had their budget accountability through DMCNR. Interviewees noted that over time there seemed to be some confusion as to “who was in charge” as certain decisions either were not made, or contradictory questions arose. It also was not always clear where direction was coming from or where accountability lay – was it with the Ministry that was the “key customer” or the capital budget holder or through the ultimate governance executive as the Project Board Chair.

NRPP’s governance structure was built to reflect the need for an integrated collaborative approach across the natural resource ministries and a shared responsibility for achieving the vision of transformation across the natural resources sector. However, to be successful any large-scale cross-ministry project needs a senior executive champion. We would expect to see a senior executive assigned the lead responsibility for such a major undertaking—a “first among equals”. This issue was compounded by the many changes in ADM’s who were in charge of NRPP leadership. The changes in leaders, including style, focus, etc. made it difficult to define clear objectives and plans, as well as engaging and aligning the various NRMs. Combined with the significant reduction in Treasury Board approved funding, and the dynamic tension of capital versus operating funding that went through two different senior bodies (e.g., Project Board and DMCNR), these factors caused the leadership accountability to be “muddled”. (We discuss capital and operating funding in more detail in the next section.) This absence of a clear senior executive manifested itself in different ways. Perhaps most telling was the quote: “NRPP had the authority, but no accountability.”

In terms of composition of various committees charged with NRPP governance, several interviewees indicated that there was a lack of IT transformation project experience in their respective governance body. Certain individuals felt that they had a good grasp of their Ministry’s business but did not have the expertise to oversee a large IT project. This was a recurring point from our interviews with Project Leader, Project Steering and Project Board members. There was a general consensus for the need to assign or obtain some experts who possessed major IT transformation experience, in addition to business knowledge, to this key project governance body.

It appears that project status reporting from NRPP up through the Project Steering Committee and Project Board was “green-tinted”. In fact, the more senior the committee, the more likely that updates and issues would be presented in “green” or closed; whereas they may have been yellow or red during PMO or subordinate committee discussions. Although the information prepared by the PMO was as accurate as possible, subsequent iterations of status reports did not consistently address or elevate challenges that were actually being encountered. As a result, meaningful discussions of these items at the component project level were muted. It was reported to us that enquires from committee and board members concerning specific status report items were not addressed satisfactorily and as a consequence, members felt they did not have adequate visibility into NRPP projects. Examples were shared that often during governance committee meetings, there seemed to be an absence of probing questions, or worse active participation.

We recognize that as the business case had not been revised, it was difficult to report against the business case or its business benefits. We also recognize, as mentioned previously, that certain committee members were not adequately equipped with large IT project experience. However, what was troubling was the observation that clarity and timeliness of information were acknowledged as challenging, and that, especially in the initial years of NRPP, information was being filtered. Whether this was driven by preparers’ understanding or expectations, or clear or unspoken directives from above, it nevertheless resulted in difficulty in accessing complete, accurate and timely information; challenged decision-making; and less than optimal management of risks, benefits and scope.

These transparency issues may have been surfaced more readily had there been on-going, periodic, independent oversight of projects, such as through recurring project health checks. Consistent with good practice, third-party reviews were conducted periodically at the overall NRPP level. However, had similar reviews been conducted to include deeper assessments at the project level, questions would likely have emerged regarding the accuracy of project reporting to governance bodies. To further supplement the IT transformation experience required for governing bodies, and to add rigour to reporting, a defined series of project health checks should be initiated at the

outset of the transformation, corresponding to key milestones, gates and/or risks during the lifecycle of the project (see Recommendation 1.2 from the previous section).

Through several interviews, it was communicated that the original vision for Integrated Decision Making (IDM) across the natural resources sector, as articulated in the 2013 business case, remains valid to this day. We also heard that this vision drove NRPP decision-making since its inception. Most recently, during NRPP wind down, there has been a greater focus and recurring discussion related to specific projects that have been designated for completion and/or transition. This has been a positive occurrence to enable collaborative planning and defined activities between IITD and product owners.

We did note, in our interviews, that although a sense of unwavering commitment to achieving the IDM vision may have been historically appropriate, there were two significant issues that should have signalled the need for a critical pause in the early years, along with a recalibration of and/or pivot from the original vision: its business case and ensuing project plan.

As noted above, the first issue was the significant gap between funding requested (capital and operating) in the first Treasury Board submission and that which was actually approved; a pattern that continued throughout NRPP's life span (see the next section). The second issue was the absence of a champion to tackle the legislative reform necessary to allow IDM to proceed. As mentioned, each of these issues taken alone should have signalled the need to adjust the timing, scope and benefits described in the original business case (and in fact, many have, on retrospection, required that a new business case be developed altogether when full funding was not approved).

Although IITD had a defined transition plan for March 31, 2019, the official date of NRPP's wind-down, key staff have been extended in transition positions. Product owners report varying degrees of readiness for the transition and wind-down. By default, IITD may have to lead and fund certain NRPP product owners. This is both inconsistent with NRPP closure and with good client-led IT development practices. Clearly, IITD should be supporting, rather than leading the transitions which require active engagement from the remaining product owners.

### **Recommendation(s):**

- 2.1 A senior executive should be assigned responsibility for any major IT transformation initiatives. A clear mandate and agreed-upon roles and responsibilities for this leader should be documented and communicated with key stakeholders.
- 2.2 Governing bodies for large IT transformations should include some experienced leaders who have undertaken similar projects in their career. Defining required skillsets and competencies at project initiation, and actively seeking to fill those roles should be an important prerequisite for project approval.
- 2.3 Clear information gathering and project reporting criteria, tools and timelines should be defined for each governance level for large IT transformation projects prior to initiation. Critical to this is developing a robust and comprehensive business case with a defined benefits realization framework and proposed benefits and measures. These reporting items should be revisited periodically during the lifecycle of a transformation and adjusted as required.
- 2.4 Consideration around further clarifying vision and objectives should be given to more completely enable wind-down and hand-off with project owners. Messaging from Project Board should be broadly communicated with product owners, NRMs and relevant governance bodies.

### **3. Funding Decisions and Practices: Impact on NRPP Decisions**

#### **Issues:**

- Initial approval of \$20 million did not result in an immediate, major overhaul of business case and project plans to match available spend and revised NRPP trajectory. Business case did not reflect actual approved spend.
- Treasury Board submissions were not submitted on a timely basis requiring recurring risk-managed spending.
- Approval of annual funding heavily focused on capital expenditures (Cap Ex) with minor consideration of operating expenditures (Op Ex).
- NRPP was the only holder of budget to complete projects (Cap Ex). Ministries not incented to develop their own operational funding requests (Op Ex).
- NRMs did not develop their own transition and funding plans (until required to do so this year as NRPP was discontinued).

#### **Risk(s):**

- NRPP working off wrong assumptions for business case and funding.
- Reporting on business case was inaccurate and incomplete.
- Multiple iterations and delays in Treasury Board submissions that required a lot of effort and recurring use of risk-managed funds.
- Potential for unapproved expenditures.
- Lack of accountability in NRMs for spend.
- Incomplete NRMs' transition plans that may lack funding commitments and required resources for service and technology requirements.

#### **Observation(s) and Discussion:**

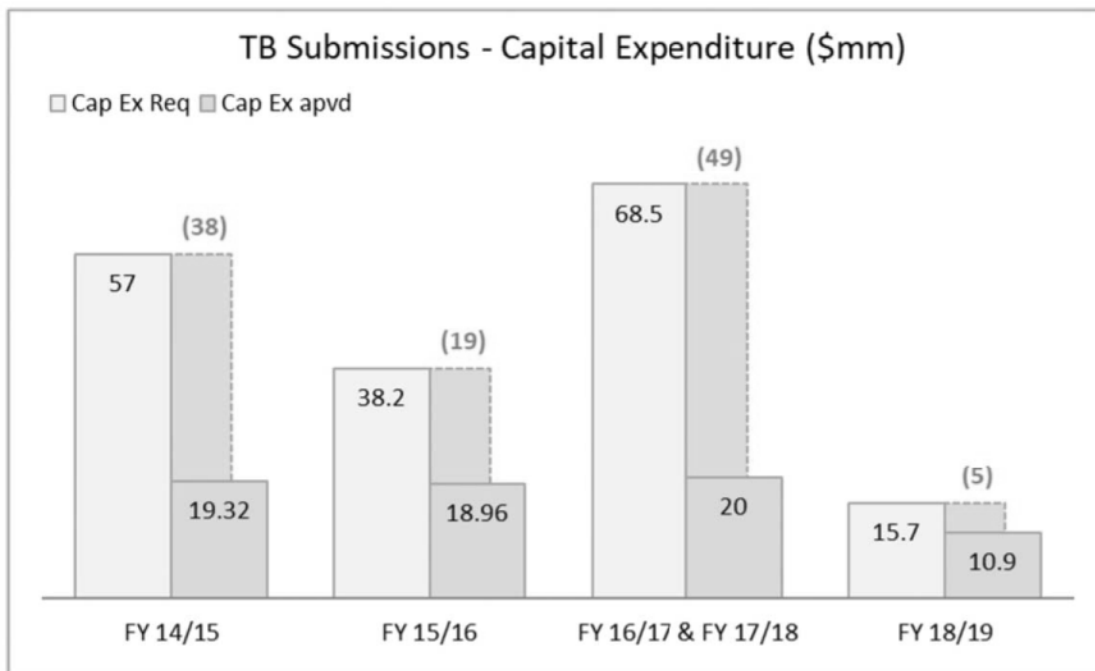
Beginning with the first Treasury Board submission for the 2014/15 fiscal year, there was a significant gap between requested and approved funding. As noted earlier in this report, the imperative to revise the business case and project plan was not immediately addressed (and what remains to this day as the only NRPP business case is that initial one). We also understand from interviews that since the business case (and related budget) was not revised downward, several projects over-scoped their requirements and hence had very high funding requests. Thus, large portions of budget allocations were consumed in scoping, and later had to be de-scoped when additional funding was not available or approved.

Continuing throughout the duration of NRPP, there remained a significant gap between funds anticipated and those actually approved. The charts below show the year-over-year difference between capital requested and granted. (We summarize the Treasury Board annual submissions in Appendix A.)

Our data was collected from these redacted Treasury Board submissions, the draft project closure report being prepared by an external PMO consultant and other project documents. Although we acknowledge that this data is not entirely complete, it certainly does illustrate some significant issues.

The first graph that follows indicates that requested funding was several orders of magnitude over what was approved. In the first four years, there was a significant gap in approved funding. As noted earlier, this gap was further exacerbated by certain ministries over-scoping their specific projects. This resulted in many churns in terms of scope revisions, as well as multiple changes to Treasury Board submissions. During interviews, examples were shared where project work was commenced or continued without clarity of available funding. There was both pressure to show progress, as well as pressure to meet budget.



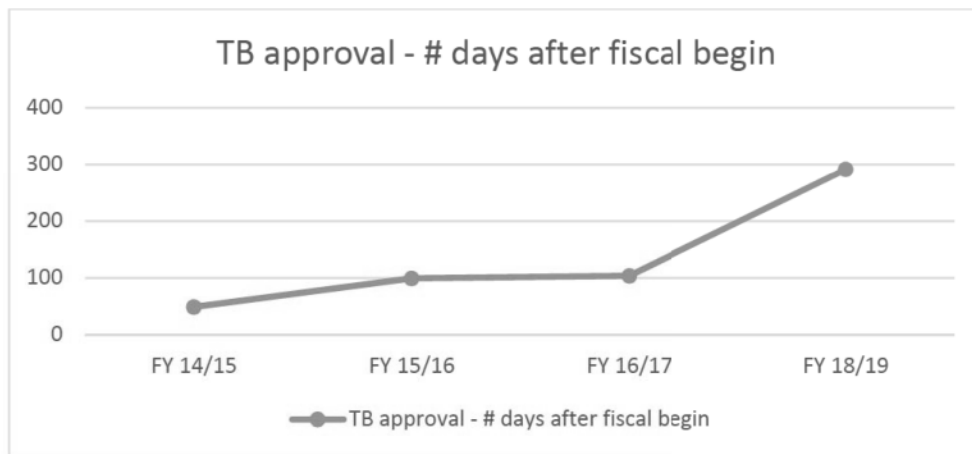


There was also a challenge to define and obtain operating funding as those expenditures had to come from individual NRMs. The motivation for NRMs to allocate some of their budget to meet the in-flight NRPP solutions was challenging. The impact of NRPP and its various projects was not consistently beneficial across all NRMs. For some, there was potentially significant benefit. For others, it was questionable. As such, operating expenditures were difficult to obtain from the various NRMs, and in the grand scheme a lesser priority for many of the ministries. This left NRPP with the responsibility to build and deliver technologies without product owners consistently setting aside appropriate and sufficient resources to transition ownership and sustain them in the long run.

Each year there were increasing delays in funding approvals, as NRPP submissions were subject to multiple versions and iterations as well as high levels of scrutiny, culminating in last fiscal (2018/19) when approval was not received until January 2019. With each fiscal period in the first four years, interviewees told us that NRPP funding approval represented a form of project gating. We can appreciate this control as it is a mechanism for Treasury Board to check progress, achievement of milestones, benefits realization and overall NRPP effectiveness in achieving its objectives – a check on actual progress against that which was planned. However, this did not consistently coincide with recurring project health checks (risk reviews) which, as noted in previous sections, would have provided more fulsome perspectives and data as part of the annual Treasury Board process.

The annual Treasury Board submission and approval process resulted in an inordinate and lengthening duration of reliance on risk-managed funds (see following graph), and uncertainty in the parameters within which project decisions could be made. Given our previous comment on certain projects being initially over-scoped, the difficulty to accurately prepare a submission was obvious and compounded this issue. We also draw the readers attention to the previous discussion between capital versus operating funding, and in section 2 where we point out the tension between NRPP capital budget ownership through its Project Board and the recurring need to seek operating funds from the various NRMs whereby budget accountability lay with those ministries and through the DMCNR. These factors combined to make budget certainty difficult to pin down.





In addition to risk-managed funding, as noted the absence of approved levels of appropriate operating expenditures resulted in a heavy reliance on Cap Ex to support NRPP projects during the last five fiscal years that still has a lingering effect.

During the period subsequent to the decision to wind down NRPP, IITD worked collaboratively with many NRMs to determine maintenance budgets which are funded from the specific ministries. This is a positive improvement as compared to the challenges noted above. However, not all ministries have operating budgets firmly in place to complete project transitions, change management, training or maintenance. In addition, post-transition service levels have not been agreed between IITD and certain client ministries. This poses a potential risk to IITD and product owners in terms of ongoing support and stewardship.

### **Recommendation(s):**

- 3.1 In future transformation projects, a material shortfall in approved funding should necessitate an immediate revision of the business case and its key components.
- 3.2 Future transformation project budgets should contain both Cap Ex and Op Ex requests to ensure that there is clear delineation, from the outset, of what funding is available for building the transformation solution and what allocations are required for transition, stabilization and future ownership/stewardship.
- 3.3 Risk-managed funding should be avoided as much as possible in future transformation projects.
- 3.4 Working with IITD, product owners should discuss and agree on detailed project transition plans, accompanied by funding requests or transfers from IITD, to allow clients to assume responsibility for completion and implementation of each project. The completeness and execution of these plans should be reported through the NRMs and to the ADMs and DMs in charge of governance.

#### **4. NRPP Benefits Realization: Alignment to Risk and Scope Management**

##### **Issues:**

- The initial NRPP business case was not revised after the Treasury Board only approved \$20 million of a requested approximate \$300 million. As such, proposed initial benefits were also not revised.
- Despite several attempts, benefits realization was not developed or deployed during NRPP.
- Benefits realization was not regularly reported to Project Steering Committee or Project Board.
- Benefits were not in place to inform, validate and assist with scope management and risk management decisions.
- A new (fourth) benefits framework has been put in place for remaining NRPP projects but is not fully functional.

##### **Risk(s):**

- Unclear project benefits may result in lower, or lack of engagement by clients.
- Potential for more write-downs of unused/abandoned software.
- Scope, risk and change management revisions may be made without diligence through an appropriate benefit's "lens".
- Information for project management and oversight may be lacking or incomplete.
- Benefits management may be ineffective as a governance tool.

##### **Observation(s) and Discussion:**

As mentioned previously, the initial Treasury Board approval of "gated" funding of \$20 million did not result in a change in business case and its components (including proposed benefits). The reduced funding and the absence of a revised NRS legislative framework meant that NRPP quickly evolved into a series of IT projects rather than fully pursuing the transformation of the natural resources sector. It is interesting to note that many interviewees stated that NRPP continued to refer to benefits articulated in the original business case, if not invoking that original business case altogether, despite the fact that it had not been fully funded and thus was no longer relevant.

In conjunction with a revised business case, the benefits framework should have been "unpacked" and its underlying assumptions tested. A robust benefits framework would have included considerations such as whether proposed or identified benefits were:

- qualitative or quantitative,
- one time or recurring,
- cost savings or cost avoidance,
- revenue enhancing,
- comparable to and validated against baseline data, and
- related to the transformed processes, roles and individuals.

Effective benefits realization for major projects should be an ongoing, evolving process tied to project, risk, scope and change management. The benefits function in an organization requires appropriate, dedicated benefits realization skills; clarity concerning the frequency of reporting up the chain of governance; and periodic independent assessment as part of project risk reviews. With regard to skillsets, the benefits function typically requires a good knowledge of the business area and an ability to validate proposed benefits, quantitatively and qualitatively, using baseline data. Indeed, a prerequisite is the gathering of baseline data, from which proposed benefits can be obtained, tracked and measured.

Although there were requests for benefits updates and reporting at different times during NRPP's lifecycle, the lack of a revised, up-to-date business case, and its accompanying accurate and complete benefits, made it difficult to fulfill such requests. Over time, this would result in NRPP making at least four different attempts to define a benefits realization framework, along with the corresponding benefits for the various projects in its portfolio.

In our interviews with Project Steering and Project Board members, no one could recall meaningful reporting or analysis of business benefits. In discussion with Project Leaders or product owners, only one individual was able to describe benefits accruing to their business area. It appears that most product owners either ignored or abandoned benefits as they were not clearly articulated at the outset, nor was there a clear process to measure, track and record benefits. As such, there was minimal accountability for benefits realization. In the end, these prior attempts at establishing benefits realization were not effective.

It appears that NRPP engaged in a process of after-the-fact benefits rationalization that did not yield an agreed-upon benefits framework. Given the fact that NRPP is now closed, the development of a benefits framework is a moot point. At this juncture it would be more beneficial to include this issue in the project closure report, while detailing the gaps between originally anticipated benefits and those actually achieved; noting deficiencies in the components of the framework or lack of monitoring of benefits realization as a lesson for future projects.

The most current iteration is making another attempt to identify and track benefits. We are pleased to note that benefits have been identified, and a separate group in IITD has been tasked with this responsibility. The latest attempt is aligned to projects that IITD will continue (rather than a retroactive re-engineering of benefits as in prior iterations). As part of this, IITD and product owners are identifying the appropriate metrics to assess benefits. Good effort has been expended through providing product owners, through collaborative assessment of their projects and objectives, with better clarity, process and metrics. These appear to be good early indicators.

#### **Recommendation(s):**

- 4.1 For future transformations, a benefits realization framework should be established at the project initiation stage. Recruiting appropriate resources and establishing baseline information are crucial activities at project initiation.
- 4.2 For future transformation projects, benefits realization should be deployed as a vital tool for project, scope, risk and change management throughout the project lifecycle. Benefits realization should be standing agenda items for project governance committees.
- 4.3 The responsibility for benefits realization should be independent of project management and technical/business delivery.

## **Acknowledgement**

We wish to thank the executives and personnel of the various NRMs, IITD and other key stakeholders for providing us with documentation and interview times during this review. Their assistance and cooperation are greatly appreciated.

## Appendix A – Summary of Treasury Board Submissions and Approvals

| Fiscal Year   | Date submitted  | Options                           | Total Cap Ex Req | Write-Downs | Funding Breakdown  | Days using risk managed funds | Cap Ex granted   |
|---------------|-----------------|-----------------------------------|------------------|-------------|--|-------------------------------|--|
| 14/15         | April 4, 2014   | Option 1                          | \$57m            |             | FY15/16 - \$18.6m Cap Ex<br>FY16/17 - \$13m Cap Ex<br>FY17/18 - \$6.3m Cap Ex  | 49                            | \$19.3m  |
|               |                 | Option 2                          | \$57m            |             | FY14/15 - \$10.8m Cap Ex<br>FY15/16 - \$11.5m Cap Ex<br>FY16/17 - \$20.0 Cap Ex<br>FY17/18 - \$14.9m Cap Ex  |                               |  |
| 15/16         | June 4, 2015    | Option 1                          | \$32.6m          |             | FY15/16 - \$18.96m Cap Ex<br>FY16/17 - \$13m Cap Ex<br>FY17/18 - \$6.3m Cap Ex   | 99                            | \$18.96m   |
|               |                 | Option 2                          | \$19m            |             | FY15/16 - \$18.96m Cap Ex  |                               |  |
| 16/17 & 17/18 | June 1, 2016    | Option 1 (Base Scope)             | \$68.5m          |             | FY16/17 - \$13.02m Phase 1, \$8.66m Phase 2<br>FY17/18 - \$6.26m Phase 1, \$16.79m Phase 2<br>FY18/19 - \$23.74m Phase 2                               | 104                           | \$13.02m and \$6.98 allocated to new scope   |
|               |                 | Option 2 (Enhanced Scope)         | \$71m            |             | FY16/17 - \$13.02m Phase 1, \$8.66m & \$0.28m Phase 2<br>FY17/18 - \$6.26m Phase 1, \$16.79m & \$1.22m Phase 2<br>FY18/19 - \$23.74m & \$1.13m Phase 2 |                               |  |
|               |                 | Option 3 (Further Enhanced Scope) | \$74.3m          |             | FY16/17 - \$13.02m Phase 1, \$8.66m & \$1.28m Phase 2<br>FY17/18 - \$6.26m Phase 1, \$16.79m & \$2.35m Phase 2<br>FY18/19 - \$23.74m & \$2.18m Phase 2 |                               |  |
| 18/19         | January 2, 2019 | Option 1                          | \$15.7m          | \$23.1m     | FY18/19 - \$11.46m in Cap Ex, \$23.13m in write-down<br>FY19/20 - \$4.21m in Cap Ex  | 291                           | - Write down of \$23.13 million in 2018/19<br>- Access to 2018/19 Contingencies (All Ministries) and New Programs Vote (Capital Contingencies) for up to \$10.90 million to complete existing scope and wind down NRPP |
|               |                 | Option 2                          | \$10.9m          | \$23.1m     | FY18/19 - \$10.90m in Cap Ex, \$23.13m in write-down   |                               |  |
|               |                 | Option 3                          | \$7.54m          | \$26.5m     | FY18/19 - \$7.54m in Cap Ex, \$26.52m in write-down  |                               |  |

## Appendix B – STAKEHOLDER CONSULTATIONS

MNP conducted stakeholder consultations between March 29, 2019 and April 18, 2019. MNP interviewed the following 20 individuals:

**Table 1: Stakeholder Consultations**

| Name             | Position   |  |
|------------------|--|--|
| Dave Nikolejsin  | Deputy Minister  | Ministry of Energy, Mines, and Petroleum Resources                                   |
| Jill Kot         | Deputy Minister  | Ministry of Citizens' Services   |
| Mark Zacharias   | Deputy Minister  | Ministry of Environment and Climate Change Strategy                                  |
| Denise Rossander | Assistant Deputy Minister and Chief Information Officer – Information Innovation & Technology Division | Ministry of Environment and Climate Change Strategy                                  |
| Adam Taylor      | Chief Financial Officer – Financial Services Branch  | Ministry of Forests, Lands, Natural Resource Operations & Rural Development Contacts |
| Scott Bailey     | Assistant Deputy Minister – Environmental Assessment Office  | Ministry of Environment and Climate Change Strategy                                  |
| Bill Devey       | A/Executive Director, NRPP Project – NRTS  | Ministry of Environment and Climate Change Strategy                                  |
| Fraser Marshall  | A/Executive Director – IMIT Investment Governance and Business Strategy                                | Ministry of Environment and Climate Change Strategy                                  |
| Andrew Calarco   | Executive Director – Strategic Initiatives and Business Innovation                                     | Ministry of Environment and Climate Change Strategy                                  |
| Julie Chace      | Executive Director, Regional Operations – Health and Safety Branch                                     | Ministry of Energy, Mines, and Petroleum Resources                                   |
| Fredo Vanlierop  | A/Chief Technology Officer and Executive Director – CTO and Delivery Management                        | Ministry of Environment and Climate Change Strategy                                  |
| Tammy Philippo   | A/Manager Project Delivery – NRTS  | Ministry of Environment and Climate Change Strategy                                  |
| Doug Stewart     | Director – Forest Tenures Branch   | Ministry of Forests, Lands, Natural Resource Operations & Rural Development Contacts |
| Perry Grilz      | Director – Range Branch  | Ministry of Forests, Lands, Natural Resource Operations & Rural Development Contacts |
| Brian Rush       | Consultant – NRPP Portfolio Management Office  | Ministry of Environment and Climate Change Strategy                                  |
| Pete Provan      | Director – IMIT Financial and Vendor Management  | Ministry of Environment and Climate Change Strategy                                  |
| Peter Walter     | Director – Business Service Desk and Product Transition  | Ministry of Environment and Climate Change Strategy                                  |
| Nelson Grant     | Director, Business Transformation – FrontCounter BC and Authorizations Provincial Team                 | Ministry of Forests, Lands, Natural Resource Operations & Rural Development Contacts |
| Michelle Porter  | Director – Lands Branch  | Ministry of Forests, Lands, Natural Resource Operations & Rural Development Contacts |
| Kiran Bagha      | A/NRPP Director, Technology Portfolio – NRTS   | Ministry of Environment and Climate Change Strategy                                  |

## Appendix C – DOCUMENTS REVIEWED

MNP reviewed a sample of internal documents from NRPP pertaining to its governance structure, funding requests over the course of the project, external reports as they relate to the NRPP project, and documentation related to the identified benefits, risks, and issues. The information was analyzed to identify issues and support recommendations throughout this report. The review of internal documents was also used to guide the development of the stakeholder consultation questions.

The sample of documents reviewed included:

- External Project Health Checks:
  - KPMG project health check (2017)
  - PWC project health check (2015)
  - PWC project health check (2014)
- Danielle Burton Report (2017)
- Gartner Report (2018)
- Treasury Board Submissions:
  - FY 14/15, FY 15/16, FY 16/17 & 17/18, FY 18/19
- Organizational Charts
  - Information Innovation Technology Division Final 072418
- Governance models
  - Intranet Governance High Level 20171101
  - Master Governance High Level 20161204
  - NRPP Governance Models – As of February 2018
  - NRS Transformation Governance Models 2014/06/02
- Benefits and Key Performance Indicators
  - NRPP Benefits Framework DRAFT 20171206 V2
  - NRS IDM Benefit Realization Framework 2014/05/01 v89
  - Benefits & KPIs
  - NRPP KPI Dashboard DRAFT v2 2016/06/10
- Decision, Issue, and Risk Registries
  - NRPP Risk Register – 2018-19
  - Sectoral Transformation Risk Register
  - Decisions register (2018)
  - Decision register
  - Issues register (2018)
- OCIO status reports
  - Q4 FY 16/17, Q1 FY 17/18, Q2 FY17/18, Q3 FY17/18, Q4 FY 17/18, Q1 FY 18/19, Q2 FY 18/19
- Project Closure Report
  - 2019-03-11 Project Closure report v01
  - 2019-04-04 Project Closure report v02
- Transition Roadmap v3 04-15
- Lessons learned
- NRPP Project Board Terms of Reference v6
- NRPP Project Board Terms of Reference v7
- Weekly dashboard – Feb 06 2018, May 08 2018, Jul 10 2018
- NRPP Steering Committee meeting dashboards
  - May 17 2018, July 18 2018, January 16 2019
- Report backs to TB and OCIO
  - IMIT CIB Report Q4 FY 16/17, Q1 FY 17/18, Q2 FY 17/18, Q3 FY 17/18

### ABOUT MNP

MNP is one of the largest chartered accountancy and business consulting firms in Canada, with offices in urban and rural centres across the country positioned to serve you better. Working with local team members, you have access to our national network of professionals as well as strategic local insight to help you meet the challenges you face everyday and realize what's possible.



ACCOUNTING > CONSULTING > TAX

[MNP.ca](https://mnp.ca)

Wherever business  
takes you.

