

# **STREAMLINING STORMWATER INFRASTRUCTURE PLANNING IN AUCKLAND *PLANNING TOOLS AND PROCESSES FOR EFFECTIVE STORMWATER MANAGEMENT***

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## **ABSTRACT**

The Auckland Council Stormwater Department has a responsibility to maintain and provide stormwater services across Auckland. With Auckland growing at a rapid rate, the Stormwater Department faces the challenge of operating and maintaining aging infrastructure whilst managing intensification and new greenfield development in an ever expanding city. This means that there is a need to ensure that planning and consenting requirements are undertaken in an efficient and timely manner.

The legislative environment within Auckland has seen a number of changes over the last few years to facilitate efficient and timely growth. This includes both the notification of the Proposed Auckland Unitary Plan to streamline regional and district planning, as well as the Auckland Housing Accord to fast track housing developments and address the current housing shortage.

Whilst there is a need to match development with growth, there is also a need to have in place transparent and environmentally sound practices that meet the requirements of sustainable management, in accordance with the principles of the Resource Management Act.

The Stormwater Department has in place a number of tools and processes to achieve this. These aim to create consistency of approach across the region and also provide opportunities to enhance or improve projects. This includes:

- The involvement of planners throughout the project cycle, closely working with engineers, contractors and regulatory;
- Engagement processes with mana whenua, key stakeholders and other utility providers to share information, build understanding and relationships;
- Capacity building within regulatory to improve understanding of stormwater projects;
- Involvement in legislative processes;
- Implementation of compliance management plans to ensure consenting and landowner requirements are understood and met;
- Regional consents for certain aspects of work.

This paper explores some of the tools and processes that have been established using examples of where projects have benefitted from their implementation.

## **KEYWORDS**

Resource Management Act

Capacity building

2016 Stormwater Conference

Stakeholder Engagement

Compliance management plan

Regional consents

### **PRESENTER PROFILE**

Rebecca is a senior stormwater specialist within the Auckland Council Stormwater Unit. She is responsible for providing planning advice and consenting support to the operations and projects teams. More recently she has been involved in the Auckland Council working groups in relation to the development of the Proposed Auckland Unitary Plan.

Jenny is an associate planner at Beca Ltd, with particular experience working on water and wastewater infrastructure projects. For the last three years Jenny and her team have worked closely with the Auckland Council Stormwater Unit, providing resource management and planning support on numerous stormwater projects.

# 1 INTRODUCTION

Stormwater is an integral part of the three waters (water supply, stormwater and wastewater) that Auckland Council (Council) directly and indirectly influences. Under the 2010 amendment to the Local Government Act 2006, the Council is responsible for the following two activities:

- Stormwater management
- Flood protection and control

The purpose of these two activities is to protect people and property from the adverse effects of extreme storm events, to minimise the nuisance of flooding, and to protect the environment and public health by reducing stormwater pollutants and minimising runoff that is discharged into natural waters.

In addition, there is a requirement to meet the purpose of the Resource Management Act, thus ensuring that any new infrastructure or the maintenance and operation of existing infrastructure, is undertaken in a way that “promotes the sustainable management of natural and physical resources”<sup>1</sup>.

The Auckland Council Stormwater Department (Stormwater Department) is responsible for the delivery of Auckland Council’s stormwater management functions. Stormwater management refers to a built and natural system that collects and conveys rainwater runoff from land to the receiving environment. Managing stormwater in the Auckland region is complex, closely connected with growth and land use, freshwater management, and requires integrated infrastructure provision. There is also a transformational shift from relying solely on hard engineering solutions to utilising water sensitive design approaches to achieve optimal and multiple outcomes for Auckland.

Given the importance and complexity of managing stormwater to meet the objectives of the Local Government Act 2006, clear and comprehensive processes are essential tools that also ensure the Stormwater Department meets its obligations under the Resource Management Act.

## 2 FUNCTIONS OF THE STORMWATER DEPARTMENT

### 2.1 AUCKLAND STORMWATER NETWORK

The stormwater network within Auckland is extensive, comprising some \$4 billion of both natural and manmade assets. This includes over 6,000km of piped network, 20,000km of streams and open channels, approximately 145,000 manholes, 360 ground soak holes, and 436 stormwater treatment devices, 492 Ponds and Wetlands. Whilst the main function of the stormwater network is to convey stormwater from the land to the sea in a way that does not cause flooding or exacerbate erosion, there is often a need to treat stormwater, either at a local or catchment scale.

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<sup>1</sup> Part 2, Section 5 of the Resource Management Act 1991 (and amendments)  
2016 Stormwater Conference

## **2.2 STORMWATER DEPARTMENT**

The Stormwater Department has multiple responsibilities and is involved in a number of areas associated with stormwater management – from policy development, to infrastructure provider, to enforcer. The Stormwater Department comprises four main teams, as described below, and whose responsibilities include:

- The Strategy and Resilience team are responsible for providing an integrated, regionally consistent stormwater strategy and policies, Asset management plan, resource management and programming and prioritisation
- The Delivery and Development team are responsible for delivering the prioritised capital expenditure works programme, ensuring new assets are fit for purpose and value for money
- The Operations and Planning team are responsible for the operation and maintenance of the public stormwater network and planning of future infrastructure requirements, flood hazard assessments, providing an integrated operations and planning approach with centrally-based planning and asset information methodology
- The Customer Services and Innovation team are responsible for providing responsive and exemplary customer service and critical response to the community

There is a need, therefore, to have clear processes and tools in place to enable the Stormwater Department to function cohesively, transparently and consistently, both within the department, but also across Council.

## **3 LEGISLATIVE ENVIRONMENT**

Over the last few years, Auckland has had an ever changing legislative environment. This includes:

- The existing operative plans, which comprise the Regional Policy Statement and 13 district and regional plans;
- The notification of the Proposed Auckland Unitary Plan (PAUP) in 2013;
- The implementation of the Auckland Housing Accord in 2013, to address the housing crises and fast track housing development in Auckland;
- The introduction of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) in 2011.

The complexity of Auckland's current legislative environment means there is potential for different interpretations and inconsistencies as to how legislative requirements are applied to projects. To address this, the Stormwater Department has worked to develop a number of processes and tools to assist with and streamline the consenting process. These are shown on Figure 1 and discussed in more detail further below.

Figure 1 – Processes and Tools for Streamlining Planning for Stormwater Management



### **3.1 PROPOSED AUCKLAND UNITARY PLAN**

The PAUP was notified in September 2013 and is currently going through the hearings process. Since it was notified, parts of PAUP (the regional aspects) were taken to have immediate legal effect, and consents (where triggered) required to be sought for these aspects.

The hearings process is anticipated to complete by April 2016 with the hearings panel report due back to Auckland Council in July 2016. Once the Unitary Plan is fully operative it will replace the existing Auckland Regional Policy Statement and 13 existing district and regional plans. Until this time, however, projects are subject to the requirements of both the operative plans and the sections of the PAUP that have immediate legal effect, creating a complex legislative environment.

Throughout the development of the PAUP, the Stormwater Department has provided advice and input to the planning process, so as to ensure that appropriate provision of rules regarding stormwater management were included in the plan.

The Stormwater Department, being part of Auckland Council, was unable to make a direct submission on the PAUP. However, the Stormwater Department has been heavily involved with the Councils case teams to ensure representation of the Stormwater Departments interests as an infrastructure provider as well as providing expert evidence on relevant topics on technical matters about stormwater, flooding and growth. This has proven to be invaluable, and has enabled the Stormwater Department to provide direct and practical knowledge of the PAUP rules and how they have impacted the Departments operation and function.

There is often a perception by planners that the scale and extent of works associated with a stormwater infrastructure provider is large, however this actually not the case. A majority of the day to day works, particularly in the operation space are small in scale, and mostly limited to gaining access into sites to undertake maintenance and repair of existing assets. Having good planning rules that provide for this type of works has been a major driver for the Stormwater Departments involvement within the PAUP process.

As a result of this involvement, the Stormwater Department has been able to practically contribute to discussions and seek better outcomes to ensure that the rules supported infrastructure management and growth.

### **3.2 SPECIAL HOUSING AREA**

The Auckland Housing Accord was introduced by Auckland Council in September 2013 to assist with the increasing pressure for housing within Auckland and the need to provide a fast track development process. Supported by the Housing Accord and Special Housing Areas (HASHA) legislation, it enables developments within identified special housing areas to fast track the consenting process and make early use of the provisions of the PAUP.

As with any housing development, there is a need to have supporting infrastructure (including stormwater services) in place, and in this respect this legislation does not just apply to developers working on special housing areas but also to infrastructure providers. As an infrastructure provider, the Stormwater Department has been required to provide additional assets to support a special housing development..

Given the criticality and fast track nature of consents under the HASHA legislation, and the need to ensure that any development meets the legislative requirements of the RMA,

the Stormwater Department has engaged with the housing project office at the earliest possible time. This has ensured that the Stormwater Department understands the level of information required to support an application, the expectations under the HASHA legislation, and that there are no surprises or hold ups while the application is being processed.

### **3.3 THE NATIONAL ENVIRONMENTAL STANDARD FOR ASSESSING AND MANAGING CONTAMINANTS IN SOIL TO PROTECT HUMAN HEALTH (NESCO)**

The NESCO came into effect in 2012. The main purpose of the NESCO is to provide a nationally consistent set of planning controls that ensures land affected by contaminants in soil is appropriately identified and assessed before it is developed, and where necessary the land is remediated or the contaminants contained to make the land safe for human use. In addition the NESCO recognises the need to consider how construction is undertaken within land with potential contamination, and the whether specific management is required to protect construction workers.

The legislation has been developed to respond to soil contamination from past practices involving stormwater and use of hazardous substances, and disposal of hazardous wastes. The NESCO then applies to the 'piece of land' on which the hazardous activities have occurred, which may be part or all of a property parcel. One of the challenges that the Stormwater Department and other infrastructure providers have encountered is understanding how the NESCO is applied to linear infrastructure projects particularly in defining what the 'piece of land' is. Another challenge has been the issue of the historic use of coal tar within Auckland roads, which is considered a contaminant of concern, the extent of this use and when consent is required.

The Stormwater Department has joined together with Auckland Council and Council Controlled Organisations (CCO's) to form a Contaminated Sites Community of Practice group. The practice group was established to foster stronger relationships between all parties from within Council and CCO's involved with contaminated land management. The overall aim of the group is to develop consistent and practical approaches to the management of contaminated land, thus achieving effective and efficient outcomes for the Auckland Region.

The group's objectives are:

- To identify and work to implement improvements in contaminated land management practices across Council and CCO's
- To share management approaches and good practice tools between members to maximise efficiency, consistency and learning across Council and CCO's
- To provide a forum where individual departmental issues can be raised/ debated, and where advice can be provided
- To encourage and promote active participation and trust amongst members, in order to foster collaboration and improved outcomes for Auckland
- To identify and collaborate around achieving contaminated land management outcomes supporting the Auckland Plan

## 4 CONSENTING MODEL

The legacy consenting model for projects undertaken by the Stormwater Department was to procure planning services along with design contracts. This often led to mixed consenting results, inconsistency of consent decisions and uncertainty.

More recently, the Stormwater Department has procured the services of planning professionals with long term contracts to help deliver the Departments works program. This has allowed the Stormwater Department to streamline its consenting processes. The Auckland region has been split into 3 areas, and the Stormwater Department has 3 consultants who assist with planning support in each of the areas.

Over the last few years, since this model has been introduced, the Stormwater Department has seen some significant benefits in terms of:

- Increase capacity and knowledge of how stormwater unit operates and specific requirements, both in relation to typical projects undertaken by the Project and Operations teams
- Increased understanding of the legacy planning documents in each area, how they are applied by the Regulatory
- Consistent approach to the interpretation of the PAUP requirements and how they affect stormwater projects
- Building relationships with the regulatory teams across the three areas, and an agreed interpretation of the legacy plans and PAUP requirements
- Process improvements and consistency of decisions

## 5 INNOVATIONS

One of the benefits the Stormwater Department has observed from the consenting model is that through the consistency of having the same consultants working on the projects, a number of innovations have been developed to streamline the consenting process.

Some of these innovations include:

- For larger projects, with multiple inputs, a traffic light email was introduced. This was an easy way to inform the Project Manager within the Stormwater Department, of consenting requirements, where deadlines for information/meetings or decisions are required, where they become critical and where they have an impact on the project. The purpose of this email was to risk code items that impact the consenting process. These could range from information needed to support the planning application, stakeholder risks, consenting risks or time delays.

Including planners in project team meetings for large or high risk projects, from inception to completion. Including planners within a regular project team meeting can be beneficial in identifying potential consenting issues, identifying how projects may be able to be changed to avoid or minimise potential effects (and thus consent requirements) and keeping the consenting team abreast of changes to projects, which may have consenting implications. Having regular meetings can help to manage expectations and demand.



- Weekly tracking emails, summarising projects that are being worked on, completed tasks and work planned for the week ahead. The Stormwater Department has numerous projects on the go at any time, and tracking their development including planning input and the consenting process is critical for managing these projects, and prioritising work load to meet requirements.
- Developed training for Project Managers and Project Engineer within the Stormwater Department on resource consents, what information is required for planning applications, and the importance of understanding the technical assessments undertaken.
- Lesson learnt sessions with the key contacts at Regulatory. The Stormwater Department has proactively sought to build relationships with key contacts within the Regulatory team. This has included informal meetings, to share information and to give and seek feedback on processing. To date they have been well received and resulted in some positive change. For example, where possible the same planner(s) have processed a number of the Stormwater Departments consents, which has assisted with Regulatory's understanding of stormwater infrastructure projects and constraints, obtaining more consistent decisions and timely decisions.
- Developing standard conditions for stormwater projects. Through the contract, and having the same team working on a number of projects over the last three years, it has become apparent that the same issues come up with respect to conditions applied to stormwater projects. In this respect the Stormwater Department and its consultants have worked closely with Regulatory to obtain a consistent approach to conditions, with a view of eventually having a set of standard conditions for stormwater projects.

## **6 PLANNING INPUT IN THE PROJECT CYCLE**

The Stormwater Department has actively worked on gaining consistency across of the region, and as noted above, early planning involvement in the concept and design process can lead to better stormwater and project outcomes. The ability to provide planning advice early on can often result in minor changes to design to reduce the consenting requirements (i.e. stormwater outcomes are still met but with a simpler consenting approach).

In this respect, the Stormwater Department has implemented a process of ensuring that planning advice is obtained at the project inception phase, and that this is undertaken in a consistent manner. For all projects, a planning assessment is completed, as a means of identifying early the likely consent requirements, technical assessments that are needed to confirm and support consents, and consultation requirements.

The Department has developed a standard template for planning assessments, and this has been developed and refined over the last three years, as the consultants working within the three areas have been able to provide advice on the format and readability.

## 7 REGIONAL CONSENTS

The Department is always looking for ways to improve consenting and to generally make the process more efficient in terms of time and cost. As the Department undertakes similar types of work across Auckland, particularly with respect to operation and maintenance activities, consideration has been given to the use of regional consents for certain activities to provide consistency in terms of approach, process and conditions. The alternative is to obtain individual consents project by project, which can be considered more 'piecemeal' and cost more in the long run to obtain and comply with.

A recent example of a regional consent obtained by the Stormwater Department, is the regional tree consent, that was successfully granted in 2015. Prior to this consent, the Department would regularly apply for resource consents for projects, either in relation to new projects or associated with operation and maintenance activities, that affect generally protected trees. It was found that these applications and subsequent consents, often have very similar scopes and typically contain similar tree protection controls. In response to this, a regional tree consent was sought, which authorises alteration of protected vegetation in a consistent manner with established tree protection controls. By taking an effects-based approach, the regional tree consent requires consideration of the impact on trees as opposed to providing for a prescribed list of common works to take place (regardless of what the impact on trees may be).

Whilst regional consents can be appropriate for some activities, there is a need to spend time on preparing a sound business case to ensure that this is the best process for achieving the desired outcome. Regional consents can often be difficult to obtain, take time and be costly. This is purely down to the nature and scale of what you are trying to consent. The last thing you want to do is reach the end of the consenting process and to obtain a consent that is overly onerous to comply with, or worse doesn't meet the expectation in terms of what it provides for.

Prior to making the decision to pursue a regional tree consent, a lot of time was spent understanding the needs of the Operation and Project teams, including undertaking site visits to understand how the Department was operating and to build that into the consent and proposed conditions. In addition, advice was sought from an arborist who was familiar with the nature of the Departments work.

Key learnings for preparing a regional consent, based on the experience from the recent regional tree consent obtained by the Department include:

- A good business case is important
- Don't rush the scoping phase
- Early engagement with and listening to stakeholders is important
- Don't hold back in your consenting approach, but do your homework
- Take time to agree the conditions of consent

The Department is currently looking at other regional consent options and is in the process of applying for a regional network discharge and diversion consent. Consideration is being given to applying for a regional coastal outfall consent and a regional dam consent. Initial thoughts are that these consents have merit because the operation and maintenance requirements are very similar. The Department is still at the early stages of information and data gathering, following which a business case will be developed to scope the consent phase.

## **8 COMPLIANCE MANAGEMENT PLANS**

As a means of ensuring that projects are undertaken in a consistent manner and that contractors are meeting their resource consent, statutory, and landowner requirements, the Department has developed the implementation of a Compliance Management Plan (COMP).

A COMP provides the statutory standards and compliance requirements which each project needs to comply with. The COMP include resource consent conditions, plans, technical report requirements, land owner, iwi approvals, best management practice guidance and relevant permitted activity criteria in a single document which identifies the key actions and responsibilities.

Prior to works starting the Stormwater Departments Planning team meets with the Project Manager and the successful contractor to go through the COMP. At this time the specifics of the COMP are discussed and responsibility regarding compliance against each condition and is agreed. The COMP is then handed over to the contractor to hold onsite for the duration of the project. If any queries arise during the construction phase the contractor is able to reference the COMP for guidance or details about where to send compliance information to. Work is continuing on streamlining the preparation of COMP document.

## **9 ENGAGEMENT WITH KEY STAKEHOLDERS**

The Department has developed a number of processes for engagement with key stakeholders, both in terms of keeping stakeholders informed of projects, and in terms of capacity building.

Key stakeholders in this respect are considered to be:

- **Auckland Utility Companies**

The Stormwater Department is a member of the Auckland Utility Operators group, which meet regularly to discuss matters of interest to or affecting the industry.

The key benefit of this group is that by working together, the various infrastructure providers are able to better understand each other's needs as an asset owner. In addition, the meetings are used to share information and to learn from each other's experiences – such as consents or conditions obtained, how the rules from the various plans and national standards are being implemented on other infrastructure providers projects, how each provider undertakes consultation/ engagement, or what contractors they use and training needs.

Through this group the Stormwater Department has been able to seek feedback on the stormwater bylaw and works over approval process. An output from that engagement resulted in a universal approval for infrastructure providers when working (subject to conditions) close to stormwater assets.

- **Mana Whenua**

The Stormwater Department has actively engaged with Mana Whenua to better understand how they viewed our consultation and engagement process, and how engagement might be better undertaken.

The Stormwater Department has subsequently established a new process which includes holding bi-annual one-on-one catch-ups with iwi representatives, and providing a monthly update email summarising projects that Mana Whenua may have an interest in.

The monthly email is used by iwi representatives as a tool to identify which projects they have an interest in. On-going consultation and engagement (site visits, involvement with projects and CIA's etc.) are agreed following this. The benefit of this approach, is that projects remain on the spreadsheet through the consenting phase, allowing updates to be easily provided.

The bi-annual one-on-one conversations help to check in with processes, changes and positions.

Given the growing workload of Mana Whenua within Auckland, given some of the legislative changes on consultation with iwi set out in the PAUP, feedback from Mana Whenua is that this process is useful as it helps to identify projects of real interest.

- **Auckland Parks**

The Stormwater Department works with the Auckland Parks Team in a number of different ways, from providing advice and guidance to Parks on their stormwater management, to working with Parks and the Local Boards as the asset owner where stormwater works take place in a reserve. Maintaining a good relationship with Parks means that where possible work programmes are aligned.

- **Regulatory**

As discussed previously the Stormwater Department has in conjunction with the Regulatory team established a key contact relationship with each of the area teams (North, South, Central and West) to maintain and build relationships, and increase capacity building across both teams. This allows the Department to work out consenting queries and amendments with the consenting team prior to a decision being granted. This has proven beneficial in discussing up-coming projects and workloads, and the consenting processes.

## **10 CASE STUDY - TE AUAUNGA AWA: WALMSLEY AND UNDERWOOD RESERVES PROJECT**

This project is a recent example where some of the tools and processes identified above have been successfully applied.

This is a key project for the Stormwater Department and is focused on providing for growth (infill) while addressing existing habitable floor flooding through water-sensitive design which involves the rehabilitation and realignment of approximately 1.3km of the stream. The Project also incorporates a number of social, cultural and environmental benefits beyond just the physical works.

A successful element of this project was the commitment of the Stormwater Department to collaborate and engage with a number of partners, stakeholders and interested parties early in the process. The Stormwater Department invited key stakeholders including Mana Whenua and Local Board representatives to become part of the Project Team.

The Project regularly met to discuss the project and provide tracking updates. Feedback from partners and stakeholders received during the workshops helped to inform the detailed design of the Project. For example, input into the design from Mana Whenua regarding stormwater treatment resulted in the incorporation of additional stormwater treatment into the design.

The Stormwater Department also undertook to engage with Regulatory early in the consent process. Early involvement and discussion helped to streamline the planning process. This included significant discussion on proposed consent conditions prior to the hearing. The result was that the hearing addressed very few matters of disagreement and resulted in a decision with practical and achievable consent conditions.

## **11 CONCLUSIONS**

Over the last few years the Stormwater Department has put in place a number of processes and practices to meet the requirements of sustainable management, in accordance with the principles of the Resource Management Act. This has resulted in a number of positive developments in streamlining the resource consent process.

The Stormwater Department continues to look for opportunities to make improvements, in the ever changing legislative environment to deliver quality and affordable stormwater services to Aucklanders.

## **REFERENCES**

Part 2, Section 5 of the Resource Management Act 1991 (and amendments)