Conservator’s Foreword

In the last 10 years, DOC and the local community have worked hard at Boundary Stream to reduce plant and animal pests to very low numbers, giving our native species the chance to thrive. Previously lost native birds like the North Island kokako and robin have been reintroduced, significantly improving the ecological integrity of Boundary Stream.

The infrastructure of Boundary Stream has been continually improved upon to allow DOC, researchers and volunteers to work in the reserve and for the community to be able to experience and be actively involved in the “cutting edge” biodiversity conservation work of this showcase project. Boundary Stream gives us the opportunity to learn how to develop and continually improve upon the systems and tools necessary for the restoration and protection of small native forest remnants. The knowledge learned here can then be applied to protect other similar remnants that occur in the “front country” of the East Coast Hawke’s Bay Conservancy and across the New Zealand landscape.

Our key focus for the next 10 years is to continually improve on what we’ve learned to date, to ensure our practices are sustainable and to share this knowledge with others. The key challenge during this time will be to work with neighbouring communities and other interested parties to better understand the interactions that occur between small native forest ecosystems like Boundary Stream and their modified surroundings (like farms, exotic forest and roads). A part of this will be to develop systems and tools that allow our native species to survive and grow beyond the borders of Boundary Stream.

This strategic plan will guide our work at Boundary Stream over the next 10 years. As part of this, the Boundary Stream Strategic Advisory Committee is tasked with:

- ensuring that annual operation plans are consistent with this plan; and
- monitoring our progress in achieving the plan’s objectives.

Peter J Williamson
East Coast Hawke’s Bay Conservator
1. Vision

Boundary Stream Mainland Island will contribute to learning about the restoration of remnant native forest habitats in landscapes dominated by exotic systems.

The ecological integrity of Boundary Stream Mainland Island will be improved.

Boundary Stream Mainland Island will be a showpiece for the Conservancy providing a centre for community involvement, learning, appreciation and inspiration.

*Te inoi ki te Mauri o Te Papauma hei whakaoho te whanau whanui i runga ia Maungaharuru* (the life force of Te Papauma brings inspiration in restoring the integrity and life to Maungaharuru).
2. Introduction

The Boundary Stream Scenic Reserve has now been operating as a “Mainland Island” for 10 years. Significant achievements have been realised over this period and this strategic plan briefly reviews those achievements and provides an outline (within the framework of the relevant policies) to guide the project through the next 10 years of restoration work. Boundary Stream is the East Coast Hawke’s Bay (ECHB) Conservancy’s “Showcase Project” where the benefits of biodiversity conservation can be experienced and enjoyed by the public.
3. Background

Boundary Stream Scenic Reserve is situated on the eastern flanks of the Maungaharuru Range about 60km northwest of Napier. It is approximately 800ha in area and extends from 1000m a.s.l. on the top of the range down to an altitude of about 300m a.s.l. The reserve is by far the biggest and most intact forest tract left in the Maungaharuru Ecological District. Not only is its size and integrity important, but also the degree to which it spans and represents a whole altitudinal sequence from lowland to montane environments.

It contains a wide variety of vegetation types, including mountain holly forest on the crest of the range, red beech, black maire and podocarp forest (mainly kahikatea, totara and matai), tawa forest, shrubs and ferns in the gullies, open kamahi on ridges and areas of kanuka. Kowhai is abundant on the numerous limestone cliff faces. There are at least 12 distinct vegetation types and over 220 species of native plants in the reserve. Threatened plants present include yellow-flowered mistletoe (*Alepis flavida*), green mistletoe (*Tupeia antarctica*) and kakabeak (*Clianthus puniceus*).

The Maungaharuru is recognised in Maori history as a place of prolific birdlife. It was used as a primary food source when adverse sea conditions prevented the gathering of kaimoana (sea food). Haruru translated means the beating of hundreds upon hundreds of wings. The area has a special place in the hearts and mythology of the local iwi that hold mana whenua (strong links to the land) over this area (Ngati Pahauwera, Ngati Hineuru, and Ngati Tu). Tangata whenua interest in seeing this reserve have its mauri (life force) preserved and enhanced is a major driving force behind its future management.

The Boundary Stream Scenic Reserve is a fragment of native forest located within a landscape in which processes are dominated by the exotic influences of pastoral farms and pine forest plantations. This landscape context represents a challenge to sustaining the improvements gained in the ecological integrity of the reserve. A key focus of the project is to work with the community to learn how to sustain the restoration of the biodiversity of Boundary Stream in the long term.

The complexity of topography and vegetation provides an unparalleled series of habitats for native wildlife in this ecological region. Common species present include kereru, tui, bellbird, pied tit, rifleman, fantail, whitehead, silvereye, grey warbler, and morepork. North Island robin re-introduced in 1998 are commonly seen and heard throughout the reserve, and are now starting to appear and breed in surrounding bush blocks (Bellbird and Thomas Scenic Reserves). North Island Brown kiwi are slowly establishing a viable population following the translocation of artificially reared kiwi chicks, sourced from eggs taken from nests in the nearby Kaweka Forest Park.
North Island kokako have also been introduced, and are now successfully breeding and expanding their population. Other threatened native bird species present include New Zealand falcon (recorded breeding in the reserve each year since 2001) and occasional visits by North Island kaka.

Native plant regeneration resulting from the intensive animal control work undertaken over the past 10 years has been spectacular, with a dense understory of palatable shrub and tree species now evident. The recovery of the threatened yellow-flowered mistletoe (*Alepis flavida*) is a direct result of the reduction and maintenance of possums to very low levels. Despite the forests modification from earlier logging and decades of browsing by feral goats, deer, pigs, possums and domestic stock, the forest ecosystem is recovering, dominated by indigenous processes.
4. Context (Policy Framework)

‘Mainland Island’ is a term now commonly used in New Zealand. It describes mainland habitats that are isolated by means of fencing, geographical features, or more commonly, by intensive restoration management. Restoration efforts on these areas have been directed mainly at controlling or eliminating exotic threats to the endemic fauna and flora, and the re-introduction of species that used to occupy these sites.

The Department’s efforts to restore biodiversity on the mainland included the selection and establishment of six ‘mainland islands’ between 1996 and 1998, these being: Boundary Stream, Trounson (Northland), Te Urewera (East Coast/ Hawke’s Bay), Paengaroa (Taihape), the Upper Hurunui River Catchment (North Canterbury) and around Lake Rotoiti (Nelson Lakes).

The Department of Conservation’s six Mainland Islands are managed with a focus on learning how to effectively carry out ecological restoration in New Zealand - and to share that information with others. A key success of the Mainland Island projects to date is that they have been effective in inspiring many community-based projects throughout New Zealand.

Various national policy documents guide and support the work being planned and carried out at Boundary Stream and the other Mainland Island projects. In the Department’s “Statement of Intent 2007–2010”, the Strategic Direction to be followed is that:

New Zealanders want their natural and historic heritage conserved.

In order to foster this commitment to conservation, people must see there is value in it for itself, and for people’s enjoyment and benefit now and for future generations.

The overarching purpose of the Department is to increase the value of conservation to New Zealanders. To do this:

• The Department will seek to entrench conservation as an essential part of the sustainable social and economic future of New Zealand.
• The Department will be recognised as an effective manager of the lands, waters, species, historic places, and the roles entrusted to it.
• The Department will lead, guide, and facilitate conservation gains throughout New Zealand, wherever conservation is most needed.
• The Department will weigh society’s values, nature’s inherent qualities, and scientific criteria in its decision making.
• The Department will actively promote outdoor recreation for New Zealanders, especially through fostering recreation use, and enjoyment of conservation land.
The eight guiding management principles for the Department of Conservation’s Mainland projects are outlined here and grouped for convenience into learning (Principles 1 to 3), biodiversity (Principles 4 to 6) and community outcomes (Principles 7 and 8). These principles were approved by the General Managers (Northern, Southern, and RD&I) in an internal memo dated 19 September 2006:

1. Site-based natural heritage management with a primary focus on learning how to carry out ecological restoration. This is achieved by addressing management questions through rigorous trials and experiments, combined with intensive monitoring and evaluation that follow standardised systems and processes.

2. Results and outcomes are communicated.

3. Sites where research and learning outcomes take precedence over biodiversity outcomes.

4. Sites that contain a number of specific projects, as a secondary objective, aimed at restoring biodiversity through intensive management.

5. Sites where boundaries are identified and can be protected.

6. Systems required to manage these sites are sustainable.

7. Sites that provide opportunities for community involvement and inspire people to support biodiversity recovery and ecological restoration.

8. Sites that inspire people to initiate and develop additional restoration projects elsewhere.

The East Coast Hawke’s Bay Conservancy draft Conservation Management Strategy which guides work in the Conservancy over the next 10 years identifies the Conservancy’s two mainland island projects as key places in which conservation management will be focused to achieve the following:

Mainland islands:

- The Northern Te Urewera Mainland Island continues to improve our capability to effectively and efficiently restore the ecological integrity of large forest ecosystems.
- The Boundary Stream Mainland Island continues to improve our capability to effectively and efficiently restore the ecological integrity of small forest remnants in modified landscapes.
- The learnings from both Mainland islands are effectively shared with others and utilised to improve the Department’s conservation management interventions.
5. Project Objectives

The Mainland Island management principles are rephrased here as objectives that are specific to Boundary Stream. Additional guidance on methods and standards is provided by the accompanying underlying text.

5.1 LEARNING

5.1.1 Research

To utilise and promote Boundary Stream Mainland Island as a centre for both pure and applied research into conservation management.

This includes both stand-alone and collaborative projects, internal and external agencies, and contributions to the development of DOC “Best Practice”.

This will be achieved through:

• establishing and maintaining relationships with research providers;
• proactively canvassing research opportunities with tertiary institutions, and other research providers;
• routinely utilizing the Field Trial Standard Operating Procedure (SOP); and
• effectively sharing results

5.1.2 Monitoring

To accurately measure results and outcomes of research and management actions.

All monitoring will be underpinned by scientific methodology and where appropriate will contribute to developing “Best Practice”. New monitoring methods or variations should be undertaken as formal research projects.

This will be achieved through:

• utilising and/or improving on “Best Practice” to achieve best results within resource constraints.

5.1.3 Sharing Knowledge

To effectively communicate learnings to a wide audience.

The results and outcomes of all research and management will be analysed and reported to DOC, other agencies, private restoration projects, and the public by the most appropriate means including peer reviewed scientific publications.
This will be achieved through:

- participation in national forums (such as Recovery Group meetings, Mainland Island Hui);
- utilising the BSMI web pages to their potential;
- production and distribution of annual reports;
- reporting on field trial and other research in a relevant format; and
- newsletters, media, public events, talks and meetings.

5.1.4 Staff Development

To provide opportunities for DOC staff (locally and nationally) to increase their capability in mainland biodiversity restoration work.

To be achieved through:

- external and internal staff exchanges;
- participation in relevant national and international forums; and
- training programmes.

5.2 BIODIVERSITY

5.2.1 Ecosystem Recovery

The ecological integrity (representativeness, species occupancy, and indigenous dominance) of BSMI is continually improved and sustained.

Species composition, biomass and natural processes are dominated by native species. All native species that could naturally occupy the ecosystem do so at population levels dictated by the natural carrying capacity of BSMI for each species.

This will be achieved through:

- Eradicating or maintaining exotic pest species at population levels that do not threaten the dominance of native species.

5.2.2 Species Recovery

The recovery of resident native species to viable population levels.

This will be achieved through:

- supplementary releases
- pest management
- other management actions as required

5.2.3 Introductions

To increase native species occupancy and develop successful strategies for reintroductions, by introducing species that could naturally occupy the ecosystem, and maintaining them at viable population levels.
Successful strategies for reintroduction could include the understanding of ecological requirements, and developing effective predator control and translocation techniques.

This will be achieved by:

• the preparation of a list of historically present species which:
  a. re-establish or strengthen ecological processes and functions
  b. contribute to learning (synergy to other projects needs)
  c. increase the national security of a threatened species
  d. are iconic or have high advocacy value or community interest

• the timing of introductions to be consistent with resource capacity and to maximise learning objectives.

5.3 COMMUNITY

5.3.1 Support and Participation

To foster a commitment to BSMI and an awareness of the value of conservation, and to inspire other restoration initiatives.

Promote opportunities for participation and knowledge sharing with iwi, neighbours and the general community.

This will be achieved through:

• functions
• volunteer opportunities
• presentations
• newsletters
• forums

5.3.2 Iwi Liaison

To proactively engage tangata whenua and encourage their active participation in the project.

Communicate regularly with kaumatua and members of Ngati Hineuru, Ngati Pahauwera and Ngati Tu.

This will be achieved through:

• inviting participation on the Strategic Advisory Group;
• inviting attendance to functions, and
• encouraging and supporting marae based information sharing opportunities.

5.3.3 Landscape Synergies

To encourage the broader community to explore and implement land use management that sustains and adds value to the ecological integrity of Boundary Stream Mainland Island.
Work with local landowners, the community, councils and other agencies to develop cooperative and innovative land use practices.

This will be achieved through:

- convening a forum of stakeholders to identify appropriate initiatives to control plant and animal pests and to support the sustained presence of native species in the surrounding landscape, and
- progressively implementing agreed initiatives with the community.

5.3.4 Infrastructure/Systems

To provide high quality infrastructure and staff capacity/capability to effectively and efficiently achieve the project objectives.

Supports the attraction and retention of quality staff, volunteers and researchers.

This will be achieved through the provision of:

- quality living areas;
- comfortable office and workshop accommodation;
- modern communication systems and IT;
- approved health and safety systems, and
- appropriate and efficient transport capacity.
6. Project Management

Boundary Stream Mainland Island project will be managed by the Department of Conservation’s Hawke’s Bay Area Office. The chain of responsibility for the implementation of this strategy will be:

1. Hawke’s Bay Area Manager
2. Programme Manager (Biodiversity Assets)
3. Team Leader Boundary Stream

The execution of this strategy will be detailed in an operational plan covering 5 years. The operational plan will be subject to accountability review annually by measuring its progress towards the strategic objectives. Consequently it will be a ‘living’ document to which changes may be made, tracked and reported on.

The project will be supported by an oversight body (Boundary Stream Mainland Island Strategic Advisory Group), a technical group (Boundary Stream Technical Advisory Group) and a project management group (Boundary Stream Management Group). The membership and role of each of these groups will be:

6.1 STRATEGIC ADVISORY GROUP (SAG)

6.1.1 Membership

Boundary Stream Team Leader, Hawke’s Bay Area and Programme Management staff, Conservancy Technical Support staff, relevant Research, Development and Improvement staff, iwi representatives, a neighbouring landowner representative and a Conservation Board representative.

6.1.2 Role

This group is to meet annually and talk to this strategic plan, the five year operational plan, review past years work, and comment on the direction of the coming years work. This will ensure longer term work plan objectives fit within the objectives of this document (Terms of Reference - see page 18).

6.2 TECHNICAL ADVISORY GROUP

6.2.1 Membership

Relevant Programme Managers and Technical Support Officers, key private research providers and others as required per the agenda.
6.2.2 **Role**

Provide ongoing technical support and advice. Meetings are to be agenda driven with a minimum of two per year (Terms of Reference - see page 20).

6.3 **MANAGEMENT GROUP**

6.3.1 **Membership**

Boundary Stream staff, Programme Manager and other staff relevant to the agenda.

6.3.2 **Role**

Provide ongoing management direction and identify needs for input from the technical and strategic groups. Meetings are to be held bi-monthly.
7. Operational Documents

Five Year Operation Plan (see docdm-222314, or on request)
Annual Work Plan (see docdm-116138, or on request)

8. References


Department of Conservation’s Strategic Direction 2008: Doc Intranet.

9. BSMI Strategic Advisory Group: Terms of Reference

9.1 LEADERSHIP

Hawke’s Bay Area Manager: Eddie Te Kahika

9.2 MEMBERSHIP

ECHB Conservation Support Manager: Kerry Hogan
RD&I Sites Improvement Manager: Elaine Wright
Hawke’s Bay Area Programme Manager Biodiversity: John Adams
BSMI Team Leader: Denise Fastier
ECHB Technical Support Officer (MI/fauna): Rhys Burns
Pou Kura Taiaro: Whetu Tipiwai
DOC RD&I Scientist - Predators & Mainland Islands: Craig Gillies
ECHB Conservation Board Representative: Liz Remmerswaal
Iwi representatives (Ngati Hineuru, Ngati Pahauwera and Ngati Tu)
Elected Neighbour Representative
Hawke’s Bay Regional Council Representative

9.3 OPEN INVITATION TO ATTEND

ECHB Conservator: Peter Williamson
Northern Te Urewera Restoration Project representative

9.4 INDICATION OF EXPECTED MEETING FREQUENCY AND TIMING

Annually in March/April following the Technical Advisory Group meeting to inform the Business Planning process for the coming year.
9.5 Roles

- To consider and recommend approval of the Strategic Plan
- To confirm BSMI operation is aligned to the 8 guiding principles for Mainland Islands.
- To review the previous years work is aligned to the Strategic Plan
- To ensure operational plans are consistent with the Strategic Plan
- To initiate a review of the Strategic Plan if required.
- To consider and discuss the operational plan for the next financial year and provide comment and direction where necessary.
- To be advocates for BSMI

9.6 Anticipated Results

- BSMI operates within the 8 guiding principles
- BSMI operates in accordance with the Strategic Plan
- BSMI is recognised as a leading site for learning at a National level.
- Key stakeholders are consulted and relationships maintained.

9.7 Strategic Advisory Group Sponsor

East Coast Hawke’s Bay Conservator: Peter Williamson
10. BSMI Technical Advisory Group: Terms of Reference

10.1 LEADERSHIP

Hawke’s Bay Area Programme Manager Biodiversity: John Adams

10.2 MEMBERSHIP

Hawke’s Bay Area Programme Manager Biodiversity: John Adams
Hawke’s Bay Area Programme Manager Threats: Dean Evans
BSMI Team Leader: Denise Fastier
Hawke’s Bay Area Manager: Eddie Te Kahika
ECHB Technical Support Officer (Threats/Biosecurity): Dave Carlton
ECHB Technical Support Officer (Fauna): Rhys Burns
RD&I Scientist (Predators & Mainland Islands): Craig Gillies

10.3 OPEN INVITATION TO ATTEND

East Coast Hawke’s Bay Conservation Support Manager: Kerry Hogan
Others as required per agenda

10.4 INDICATION OF EXPECTED MEETING FREQUENCY AND TIMING

March/April - Compulsory, to feed into business planning
July/August (prior to the summer field season) - to provide advice on issues related to the forthcoming field season if needed
December (height of the summer field season) - to provide advise on current programmes if needed
10.5 ROLES

- Support the BSMI Team by providing technical advice around detail and in establishing systems.
- Provide quality technical direction and resolve technical issues.
- Peer review work programmes.
- Provide the framework and input into the write-up of reports and scientific papers.
- Provide the framework and input into the development of the planning, reporting and reviewing systems.
- Peer review and prioritise research proposals and field trials.

10.6 ANTICIPATED RESULTS

- Prioritised, well designed and implemented trials, monitoring and research programmes.
- Effective integration with national initiatives.
- Effective information transfer.

10.7 TECHNICAL ADVISORY GROUP SPONSOR

Hawke’s Bay Area Manager: Eddie Te Kahika