ANNUAL REPORT

FOR THE YEAR ENDED 31 DECEMBER 2006

ADVOCATES FOR THE TONGARIRO RIVER

CONTENTS

COMMITTEE 2006

Ross Baker*

Bob Appleton » REPRESENTATIVE, LAKE TAUPO FISHING ADVISORY COMMITTEE

Bruce Coldicutt

Mark Cosgrove » IMMEDIATE PAST PRESIDENT

Stuart Crosbie*

Richard Kemp » VICE PRESIDENT

Heather Macdonald » PRESIDENT

Julian Proctor

Tuatea Smallman

Sylvia Smith

John Toogood*

Eric Wilson » SECRETARY TREASURER

John Wheeler

* Co-opted during the year.

Bruce Coldicutt and Sylvia Smith resigned during the year. Graeme Nahkies has continued to act in an advisory role.

The Registered Office of
The Advocates for the Tongariro River
Incorporated is care of
213 Taupahi Road, Turangi.
The postal address is
P O Box 335 Turangi 2751.
www.tongariroriver.co.nz

Photograph on front cover: A sign on Ross Baker's motel, facing State Highway 1. In May 2006 when Ross erected the sign, it was the only anti-Didymo sign in the North Island, with the exception of one at the Wellington terminal of the Picton ferry.

NOTICE OF ANNUAL GENERAL MEETING

The Fifth Annual Meeting of the Advocates for the Tongariro River Inc. will be held at the Tongariro River Bridge Fishing Resort, State Highway 1, Turangi, on Easter Sunday 8th April 2007 at 3:00pm.

≈ AGENDA

The business of the Annual General Meeting will be to:

1 Record those present and note apologies.

2 Receive the Minutes of the Fourth Annual General Meeting held on 16th April 2006.

3 Receive the President's Report and approve the Financial Statements.

4 Consider any motions of which due notice has been provided. The Rules of the Advocates for the Tongariro River are available on the Advocates' website: **www.tongariroriver.co.nz**.

5 Appoint an Executive Committee, comprising a president, a vice-president, a secretary, a treasurer (or a secretary/treasurer) and committee members, making a total of up to 11 members.

6 Consider any other matters.

7 Discussion of a topical issue.

At the conclusion of the meeting, members are invited to afternoon tea at the Tongariro River Bridge Fishing Resort.

≈ MINUTES

Minutes of the Fourth Annual Meeting of the Advocates of the Tongariro River Inc held on Sunday 16th April 2006 at 4.00pm at the Tongariro River Bridge Fishing Resort Conference Room, Turangi.

This, the fourth Annual Report of the Advocates for the Tongariro River Inc, consists of the President's Report, together with the Financial Report.

Present

Heather Macdonald (Chair), Mark Alston, Tony Charlton, Heather and Bruce Coldicutt, Bill Colston, Mark and Alison Cosgrove, Lawrie Croxson, Walter Freitag, Chris James, Richard Kemp, Alasdair McNab, Julian Proctor, Donald Ross, Jen Shieff, Tuatea Smallman, Clint and Brenda Teague, John Toogood, David Treseder, Dick Truebridge, Barry Waite, Eric and Lorraine Wilson, John and Betty Wheeler.

Tuatea Smallman opened the meeting with a Karakia.

Apologies

Bob Appleton, Warren Butterworth, Sam Cranfield, Helen Elliot, Will Kemp, Bob MacDonell, Sylvia Smith, Eddie Tonks, Neville Young.

The motion (Heather Macdonald, Alison Cosgrove) that these apologies be sustained, was carried.

The Meeting received with regret the news that Bruce Diehl, who attended the last Annual Meeting, had died.

Minutes of 2005 Annual Meeting

The motion (Heather Macdonald, Julian Proctor) that the minutes of the 16th April 2005 Annual Meeting as circulated in the Annual Report of 2005 be taken as read and confirmed, was carried.

President's Report

The President's report was circulated in the Annual Report. Heather Macdonald commented briefly on the key items of her report. Her remarks focused on a full and busy year for the Advocates committee.

The motion (Heather Macdonald, Richard Kemp) that the President's report be received, was carried.

Financial Report

The Treasurer explained an omission in the statement of accounts. For 2005 Liabilities should read $812. For 2005 Net Assets should read $13,411 and not $14,223. He said that otherwise the accounts were correct and not affected by the omission.

He thanked the Pharazyn Trust for a donation of $3,000, which followed a previous donation of $10,000 in 2004. He said that these donations give the committee confidence to continue working towards its objectives.

The Treasurer recorded his thanks to the number of members who have given a donation with their subscriptions.

The meeting gave a vote of thanks to the reviewer.

The motion (Richard Kemp, Betty Wheeler) that we write to the Pharazyn Trust and pass on to them the thanks of the meeting, was carried.

The motion (Heather Macdonald, Richard Kemp) that the amended accounts showing liability of $812 and Net Assets of $13,411 for 2005 be received, was carried.

To consider any motions of which due notice has been provided

No notice of any motion had been provided.

Appointment of officers and committee

The following appointments were made

President	Heather Macdonald
Vice President	Richard Kemp
Immediate Past President	Mark Cosgrove
Secretary/Treasurer	Eric Wilson
Committee	Bob Appleton, Bruce Coldicutt, Julian Proctor, Sylvia Smith, Tuatea Smallman, John Toogood, John Wheeler

General Business

Richard Kemp thanked Heather Macdonald and the Committee members based in Turangi for the efforts they had made on behalf of the Advocates.

Richard Kemp took the Chair for the remainder of the meeting.

1 *Planting Project*

Jen Shieff as project manager outlined Phase One of the Planting Project, a project designed to eliminate undesirable plants and re-establish with natives in conjunction with DoC and according to DoC's planting plan. A successful application from Waikato Conservation Environment and Ecological Enhancement Trust will finance the project. Friday 5 May is for clearing and Monday 8 May for planting.

Jen was thanked for her report.

John Toogood spoke of the problem of feral or wilding pines and spoke passionately of the need to eliminate the wilding pines and restore the native vegetation before we lose the icon of the river.

Richard Kemp stated that he was convinced a major national sponsor could be found to finance this work in consultation with property owners and, if appropriate, with Ngati Turangitukua. With sufficient publicity, this could happen.

Mark Cosgrove spoke of the effects of flooding and pines on the State Highway One bridge and felt that the matter should go to the Management Forum.

John Wheeler thanked John Toogood for his initiative in bringing the matter to the meeting. It was noted that pines have been planted in plantations bordering the river reserves, with the result that there are now undesirable feral pines.

2 *Didymo*

Eric Wilson expressed the view that the invasive alga Didymo would be a disastrous intruder for all if it entered the Tongariro. He further stated that given that there is little known about Didymo at this time our best action was to change our behaviour and to wash our gear just as sea anglers do.

He emphasised that we must

1. Check and remove vegetation from all gear before leaving the riverbank.
2. Clean all gear, using 5% dishwashing liquid in a spray container, or wash waders for one minute in a bath of the same solution.
3. Dry. If cleaning is not an option, dry for 48 hours. Include flybox and anything in contact with the water.

Members were given a presentation to show how cheap and easy it is to clean gear. Eric emphasised that whether we are anglers or not, we must be aware of this message and pass it on to others.

3 *Tracks and Rivers*

John Wheeler told the meeting that we had made a submission for a track in the Kaimanawa Forest Park for fishing and for walking access to the upper river.
Mark Cosgrove asked for support to lobby for access to 13 kilometers of the river along the boundary of Prison land.
Eric Wilson told the meeting of the secret sale of the Mangamawhitiwhiti block by Land Corp, although he did not have any detail of the sale. Tuatea Smallman said there had been no sale.
Alison Cosgrove stated that as a non-angler she appreciated the river walks.

4 *Proposed Tongariro River and Catchment Plan*

It was noted that it had been the intention to publish the plan in the 2005 Annual Report but the document had not been received in time for the posting. Environment Waikato's draft Management Plan was distributed at the meeting.
Mark Cosgrove outlined some of the things that needed to be considered in relation to the Management Plan. For example, Mark posed two questions: "How do we know if the managers are doing a good job?", "What action will be taken to clear the river of ash if there is another eruption?" He urged all present to consider the Management Plan carefully and forward their ideas to the Committee for inclusion in future discussions. He said that we speak for the silent and absent users of the Tongariro.
Julian Proctor questioned the wisdom of having heavy trucks accessing the river from Te Rewha Street across a sewer line that has already been broken in the past.

Richard Kemp concluded chairing this section of the meeting and Heather Macdonald resumed the Chair.

Heather thanked Mark Alston of the Tongariro River Bridge Fishing Resort for providing the venue for the meeting.

Tuatea Smallman closed the meeting with a prayer.

The meeting closed at 5.32pm

≈ THE ANNUAL REPORT AND GOALS FOR 2006

President Heather Macdonald reports:

The Advocates for the Tongariro River aim to be recognised as an informed, balanced and authoritative group, seeking to sustain and enhance the Tongariro River for future generations. Our work began when we formed an Incorporated Society in 2002, a society which developed from a smaller action group, the Tongariro River Action Group, known as TRAG, whose members included the Advocates' first Secretary, Gill Osborne, as well as Arthur and Robin Parish.

We were saddened at the death of Robin, the Advocates' first Treasurer, who passed away on the 5th July 2006. For several years prior to 2002 when they joined the Advocates, Robin and Arthur were instrumental in working with neighbours in the Koura Street area to lobby for flood protection.

This report is set out according to the goals and purposes of the Advocates. The Advocates' purposes are to

- actively engage in fostering Tongariro River management strategies, including long-term strategies;
- promote methods of managing the river which have the desired effects of flood protection and of preventing and/or minimising erosion; and
- take such steps as are appropriate to facilitate the protection and promotion of the Tongariro River and its environment as an effective nursery for rainbow and brown trout.

Lobbying for awareness and action to stem the invasion by the alga Didymo (Didymosphenia geminata) has been the focus of the Advocates' attention this year. This has included

- spreading awareness of Didymo through advertising and public meetings. Appendix 1 includes a full log of Didymo awareness action taken by the Advocates;
- lobbying Ministers, MPs and government agencies for action to contain the alga;
- purchasing six months of air time with Radio Tuwharetoa (Radio Triple T) and Taupo Radio Network for the broadcast of professionally scripted Didymo awareness messages. Appendix 2 contains the scripts;

- making available to the local public and to Advocates the latest research information on Didymo;
- being instrumental in holding a public meeting in May attended by over 100 locals, regional business representatives, tourism operators, fishing guides, district and regional councillors and the Taupo Mayor, to set an agenda for action to keep Didymo out of the Central North Island;
- being instrumental at that May meeting in creating a public forum for the Central North Island Didymo Action Group to build their agenda for action;
- attending the Christchurch Didymo Meeting. Appendix 3 contains my report on the meeting.

GOAL 1

To have widespread public awareness of the Tongariro River – its past, its present state with the negative impact of the hydro power scheme, and its potential future degradation if remedial action is not taken.

Our Annual Reports are the main means of addressing this goal. In addition, our website and "the Advocate", no.7, sent to members in November 2006, were our main methods during the year of keeping members in touch with current issues and with what the Advocates are doing.

Environment Waikato's River Management Plan for the Tongariro River has been long awaited by the Advocates and at the time of writing (February 2007) has not been forthcoming.

The threat to the River posed by an invasion of the alga Didymo remains a very real concern. We want to see everything possible done to keep it out. Regretfully we are not confident that enough is being done particularly with regard to containment and border controls. Opportunities have not been taken to make best use of the three obvious boundaries where containment measures could be implemented, for example at international airports, domestic ports and airports, and in the Taupo Fishing Licence area. The Advocates will continue to lobby for such measures.

Regular water testing in rivers is essential for early detection of Didymo, enabling better controls to be implemented. This is a finding reported by Dr Barry Biggs, a NIWA scientist contracted by Bio Security NZ to work on controls for Didymo. Dr Biggs's research reports are on the Bio Security website: **www.biosecurity.govt.nz**. Dr Biggs recommendation for the Tongariro River is that water be tested fortnightly, immediately downstream of the main fishing spots. The Advocates would like to see such a testing schedule implemented immediately and applied to all the rivers in the Taupo Basin. We understand that the Department of Conservation will be developing a regular testing regime for the Tongariro and we will advocate for this to happen.

With regard to felt soled fishing boots/waders which Dr Biggs has found to be a major means of transporting live Didymo cells, the Committee is leaning towards lobbying for a ban on felt soles, at least in the Taupo Fishing Licence area, and at least until we have had more debate about the adequacy of options such as dedicated gear.

For the research finding on felt soles as major carriers (referred to by scientists as vectors) for Didymo, see the article under "Didymo findings" on the Advocates' website.

The convention we have developed of having a science based seminar to put new information into the pubic arena, continued this year with a public address on 30th August 2006 by Dr Barry Biggs. All current decontamination information can now be down loaded from the Bio Security NZ website use the following link: **http://www.biosecurity.govt.nz/files/pests-diseases/plants/didymo/jan-06-survival-study.pdf**. I strongly urge members to keep an eye on this site as it is updated regularly with latest findings on effective cleaning methods. It is the responsibility of all anglers and other river users to keep informed and to adopt the recommended procedures.

To mark a piece of local history and give an exotic tree its rightful place on the riverbank, a plaque was erected by the Advocates during the year beside the grand weeping cherry tree on the River Reserve between Poto St and Cherry Tree Reserve. The plaque acknowledges the local residents who planted the tree in 1965, at the inception of the Tongariro Power Scheme, stating that it was planted to "weep for a river that would never be the same again". People walking along the River Reserve have noticed the plaque and commented positively on it.

GOAL 2

To gain public involvement and support for the Advocates' aims and to build membership

Apart from the two public meetings held during the year, one in May at the Tongariro Lodge (Didymo awareness and action) and one in August at the Tongariro River Bridge Fishing Resort (Dr Barry Biggs's presentation), our major initiative for involving the public in our advocacy work was the Planting for the Future project.

In summary, the Planting Project involves the Advocates working with the Department of Conservation (DoC) and the community to plant the parts of the riverbank managed by DoC. DoC have had a planting plan drawn up which provides cover for trout and strengthens the riverbank, after noxious plants such as blackberry, broom and honeysuckle have been cleared. At the time of writing, we are applying for funding for further plants and a plan has been drawn up by DoC for the next stage. As we did for Stage One, we will arrange press releases to inform the public and invite them to participate.

The first stage of this project was completed in 2006 and you can read an account of it in Appendix 4. Each planting stage will include a maintenance plan for the River reserve from the Major Jones footbridge downstream to the State Highway One bridge and once the stages are complete, clearing and planting will have taken place from the Major Jones footbridge downstream to the State Highway One bridge.

I wish to acknowledge the valued contribution of many members of the public who have taken personal responsibility for ongoing care of the plants and maintenance of the River Reserve.

A reflection of the way in which the Advocates have become involved with community activity was that during the year we received invitations to speak to the Turangi Lions Club and the Turangi Garden Club. At these meetings, I spoke about the Planting for the Future project and about the work of the Advocates. I was also interviewed on Radio Tuwharetoa (Triple T) and Radio Network, Taupo.

Membership at December 2006 was 90 households, with a total of 111 members.

GOAL 3

To establish effective dialogue with Iwi and develop mutual trust.

The Committee has continued to have the benefit of the support of our Kaumatua, Tuatea Smallman who provides a valuable link between Ngati Turangitukua and the Advocates. However, we recognise with sadness and frustration that we have moved no further towards dialogue with Iwi in the past year.

Further to the letter we received from Arthur Smallman in 2005 saying that Ngati Turangitukua had developed plans for the Lower River, we have heard nothing more. The delay in clearing the willows and debris from this section of the river is disappointing. As we noted in last year's Annual Report, significant funding is being made available to the Ngati Turangitukua by Genesis Energy every year for the 35 years of the Genesis resource consent. However, to the best of our knowledge, none of this money has as yet been used for River works.

The Advocates will continue to make efforts in the coming year to develop meaningful connections with local Iwi.

We have enjoyed developing a relationship with Radio Tuwharetoa (Triple T) during the past year. Staff there, and in particular Judy Thomas, the Marketing Manager, have been enthusiastic in their support of the Advocates Didymo Awareness Campaign. Judy was proactive in writing a script targeted to listeners of Triple T and getting locals and children from the Kura Kaupapa to voice the script which was broadcast, along with three others, between June and December, and in arranging for me to be interviewed about the Didymo threat. The scripts can be seen in Appendix 2.

GOAL 4

To ensure the promises made by central and local government and power companies in respect of doing least harm to the Tongariro River are kept.

We continue to meet on a regular basis with the management of Genesis Energy. Matters discussed over the past year include

- the Advocates' concern about the unnotified and life threatening release of water down the River in September; and

- ways of getting traction towards developing a practical management plan for the River, inclusive of the plans of the Ngati Turangitukua.

The Bio Security NZ signs about Didymo and water release signs that have appeared at points on the River were put up by Genesis. We appreciate the support Genesis has given the Advocates in enabling us to host the public meeting we held in August. Genesis is actively engaged in the collective measures to keep Didymo out of this region as its invasion poses significant threats to hydro generation.

GOAL 5

To have significant input into the development of a Management Plan for the River, drawing on up-to-date scientific and engineering information.

The River Management Forum has met only once in the past year. The development of a Management Plan for the river, while legally required under the conditions of the consents granted for River works has, it seems, been at a standstill for a good part of the year, due at least in part to Environment Waikato's lack of action.

In the middle of 2006, in response to our feedback, Environment Waikato provided the Advocates Committee with a revision of the draft Management Plan given to members at our 2006 AGM. That redraft differed very little from the original and did not constitute or contain a management plan. It was unacceptable to the Advocates. We then met with Environment Waikato and provided for discussion, a framework, outlined below, around which a Management Plan might be shaped. The conceptual framework was well received by Environment Waikato and later that month by the River Management Forum.

The framework we proposed for developing a Tongariro River Management Plan starts with the Consent Order requiring a Management Plan, and then, in a first stage, addresses the three issues recognised by that Consent. The Consent requires Environment Waikato to deal with vegetation, feral plants and gravel extraction. The Advocates propose that in each case the Plan should identify the problem, set out what Environment Waikato plans to do about it and indicate the expected outcomes. Then, in a second stage the Plan might examine six other problematic features of the Catchment, namely water quality, pest plants, eruptions, lahars, channel switching, flood control and wetlands management.

Through discussion with Environment Waikato and members of the River Management Forum it was determined that in order to address both River and Catchment management

issues, two documents would be necessary. Environment Waikato agreed in October 2006 to proceed with the first stage, covering the issues recognised by the Consent.

The second stage, that of producing a Catchment Management Plan, is to be approached through a subcommittee of the Tongariro River Mangement Forum, convened by Jarrod Bowler, hydrologist and Environmental Manager for Genesis Energy. The Advocates are represented on that subcommittee.

We still hold the concerns we expressed in last year's Annual Report that lake level management, and its bearing on the River Management Plan, has not yet been addressed. There is ongoing and sometimes heated discussion amongst property owners as lakeshore erosion continues; everybody recognises that the effects are due to a combination of environmental and engineering influences. Yet there is some difficulty in taking the next step – to examine the engineered influences (also known as lake level raising) and to see if the erosion can be attenuated by a modified water storage regime. The Advocates have observed that both the lakeshore erosion problem and the agrading occurring in the lower Tongariro River might be addressed at the same time, but this option has not yet been examined.

GOAL 6

To monitor the River Management Forum's effectiveness in involving key stakeholders and interest groups in discussion and input into decisions about the River.

This goal has been a particular focus of the Advocates as we seek to ensure that fullest informal as well as formal consultations take place amongst the stakeholders. While such consultation is very much a 'work in progress', we have two particular matters to which insufficient attention has been devoted. Both of these matters are volcanic in nature.

The first applies to further eruptions: the deposit of mega-tonnes of ash in the catchment from an eruption ought to be specifically planned for and dealt with in a management plan. At a minimum, the plan ought to provide for flushing flows of sufficient intensity to move ash quickly into the lake.

The second applies to similar concerns after lahars; while small, overflow lahars might be contained or confined to the Whangaehu River bed or deflected back by a bund, major lahars in the past have found their way into the Tongariro River catchment via the Upper Waikato and other streams to the north east of the crater lake.

The questions to which we seek answers now concern the survivability of the Tongariro River's ecology under such events. In part, these questions are two-fold; one set relates to the operation of the Rangipo Dam and the Poutu Canal, the other relates to the plans and procedures of DoC who are the managers of the fishery, and therefore responsible for damage limitation and recovery.

GOAL 7

To liaise effectively with central and local government, their relevant agencies and key personnel on freshwater matters and policy issues that impact on the River.

The Advocates have developed open and constructive relationships with Genesis, Environment Waikato and DoC and have met with each of these organisations in 2006.

We have had a good deal of contact with Bio Security NZ during 2006 and have received funding from them to help us run our public meetings in May and August and pay the travel costs of speakers for those meetings. Bio Security NZ also funded the Advocates' radio time for the Didymo awareness campaign.

Wellington-based Advocates were active in lobbying Members of Parliament on the Didymo issue. Letters from the Committee went to the Minister of Bio Security, to opposition spokespeople for Bio Security and to local members of Parliament. The responses have, at best, done little done to provide the border protection measures the Committee considers reasonable and necessary for Didymo containment.

GOAL 8

To establish effective liaison with all local groups which have similar interests in the Tongariro River and other rivers, with the purpose of co-ordinating lobby and action.

The Advocates continue to have representation on the Taupo Fishing Advisory Committee and we appreciate the role Bob Appleton plays to provide the link between that group and ours.

We have collaborated with the National Trout Centre Trust in lobbying for a circular walking track from the Major Jones Bridge to the Red Hut Bridge and are pleased that the track on the downstream part of this left bank walkway, on land controlled by DoC, from the Hydro Pool to the Tongariro National Trout Centre is has put through, but signage is needed. The vision of the Advocates was that this be a track of similar quality to that on

the opposite side of the River and that it be promoted as a route to walk from the Town to the River and the Trout Centre. Some further work remains to be done if this is to become a reality.

Another project which was initiated during 2006 is to do with the removal of feral pine trees (wilding pines). This has required liaison with local groups and wider networking, which have been managed by Committee member John Toogood. Early in 2007, a plan, aimed to have the support of DoC and Environment Waikato, is about to be drawn up. A funding application to the Waikato Conservation Environmental and Ecological Enhancement Trust is being prepared and, if successful, work will be commenced during 2007. This will be a ten year project intended to enable regeneration of native flora in the Tongariro River basin.

GOAL 9

To increase the Advocates' collective knowledge of (a) all aspects of the River and (b) the functions and findings of other similar advocacy bodies.

Putting information about Didymo into the public arena has been the focus of the Committee's energies over the past year. Very few other places in New Zealand have a river of such significance with so many walk-in points so close to a state highway and near populated areas, and these factors heighten the risks of contamination.

As previously noted, the two public meetings in May and August did a great deal to put information in front of people and assist in lobbying Bio Security NZ and DoC for action on preventing the spread of Didymo.

One of our Australian members recently drew our attention to a policy position held by the government of Iceland. Before any fishing equipment is allowed into Iceland, the angler seeking entry must provide the Icelandic customs with a certificate of decontamination, signed by an authorised veterinary professional. The rationale given for this requirement is that Iceland has never had any destructive freshwater algae and intends to keep it that way. Could this be a lesson for New Zealand policy makers?

GOAL 10

To maintain financial stability and cash flow to meet planned activity

The Financial Report for the year ending 31 December 2006 follows this report.

IN CONCLUSION, I wish to thank all Advocates members for their continued support, and in particular I wish to thank the Committee and Bob Appleton who liases between the Advocates and the Taupo Fishing Advisory Group. Those Committee members who live locally – Ross Baker, Mark Cosgrove, Tuatea Smallman, John Wheeler and Eric Wilson – have been invaluable in making time for the day-to-day work of the Advocates. My special thanks go to John Wheeler who willingly and capably stood in for me for three months during the year.

Out-of-town Committee members have provided a wide range of insights by telephone and email. In particular I wish to acknowledge the support and expertise of my Vice-President Richard Kemp. His advice, and that of our adviser Graeme Nahkies, is always sound and readily available.

I wish to acknowledge the professionalism of the team at Origin Design and once more I wish to thank Bob McDonnell of Cognito for giving his ideas, time and his lay-out skills – and for giving us at-cost printing services. Bob scripted the radio scripts for Didymo awareness and arranged for the scripts to be professionally voiced and recorded. These valuable services were provided at no cost.

We were very sorry to lose Sylvia Smith, through pressure of her Wellington-based work, as a Committee member. Sylvia's graphic design expertise and communications knowledge helped the Advocates establish and maintain its image and role. We value Sylvia's continuing work for and advice to the Advocates, which she does in a voluntary way.

Bruce Coldicutt also resigned from the Committee during the year. His passion for the future of the River and its environs is well known.

Co-opted to the Committee during the year were Ross Baker, Stuart Crosbie and John Toogood.

I wish to thank Mike Forret who maintains our website and email database. We continue to benefit from Mark Cosgrove's scientific expertise and appreciate the thinking he has contributed to help shape a River Management Plan.

Jen Shieff provides writing and editing expertise. This has been a huge support and I wish to thank her for this and for continuing her role as the project manager of Planting for the Future.

My thanks go to Mark Alston of the Tongariro River Bridge Fishing Resort for generously continuing to provide this space as a venue for our meetings.

Finally, I wish to acknowledge the contribution of Eric Wilson our Secretary/Treasurer, who spends huge amounts of time updating our membership database and making funding applications as well as keeping the minutes and accounts. He has ably assisted Jen with the Planting for the Future Project and has built an important relationship with the Prison which has meant we have achieved even more than we had hoped with this Project.

I am pleased to move the adoption of this, the fifth Annual Report of the Advocates for the Tongariro River Incorporated.

Heather Macdonald

President
8 April 2007

≈ FINANCIAL STATEMENTS

for the twelve-month period ended 31 December 2006

Income & Expenditure

	2006	*2005*
Income		
Subscriptions and donations	6,937	4,930
Grant from Bio Security New Zealand	3,149	
Waikato Conservation Environment and Ecological Enhancement Trust	2,000	
Interest	454	
Pharazyn Trust grant		3,000
	12,540	7,930
Expenditure		
Advertising and Promotion	325	162
Post Box Rental	125	125
Website	517	328
Newsletters	775	3,475
AGM, Reports, Seminars	2,443	
Postage, Stationery, Banking	604	780
Didymo Radio Advertising	3,421	
Didymo Seminar	574	
Planting Project	1,996	
Speaker Costs		123
Total Expenditure	10,780	4,993
Excess of Income over Expenditure	1,760	2,937

Statement of Financial Position

	2006	*2005*
Current Assets		
Bank	4,064	6,223
Deposit	9,107	8,000
Debtor	2,000	
Total Assets	15,171	14,223
Current Liabilities		
Creditors	0	812
Net Assets	15,171	13,411
Accumulated Funds		
Balance at 31 December 2005	13,411	11,286
Net Surplus for year	1,760	2,125
Total Surplus	15,171	13,411

≈ APPENDICES

1 Keeping Didymo Out: Log of Advocates' action to date

October 2005

- Advocates Committee express concern about Didymo in a letter to the Department of Conservation (DoC) and the Taupo Fishing Advisory Committee, urging managerial action
- Committee members attended a Bio Security NZ Didymo Awareness meeting for stakeholders at Genesis, Tokaanu.

November 2005

- Advocates' newsletter No.6 has President's piece on Didymo and a feature on Didymo by Mark Cosgrove
- In the absence of any action from DOC, Bio Security NZ or the Taupo Fishing Advisory Council to get information into the public arena, the Advocates produced 4,000 posters and leaflets with the distinctive graphic ALERT, informing people about Didymo characteristics and prevention. The Advocates distributed these to sports and fishing shops, lodges and motels and put up posters at key river access points

December 2005

- Bio SecurityNZ pamphlets promoting check-clean-dry became available through sports shops

April 2006

- Committee members attended a Didymo Awareness meeting in Taupo, convened by DoC Fisheries and Fish and Game, a group that was to become, along with Genesis, Kayak NZ, and a representative of the Tuwharetoa Trust Board, the Central North Island Didymo Action Group
- Committee concern that no real leadership or containment measures were being taken by Bio Security NZ prompted Advocates to call a public meeting, targeting business people and the wider community, to lobby for action to contain Didymo and stop it spreading to the North Island.

May 2006

- Advocates convene a public meeting at Tongariro Lodge, Turangi, attended by over 100 people. Sponsorship was obtained from Genesis Energy and Tongariro Lodge. DoC and Fish and Game representatives, now officially the Central North Island Didymo Action Group, were the main presenters. Several MPs were invited but none attended. Clayton Stent, Mayor of Taupo spoke and also Scott Lee, from Destination Lake Taupo. Bio Security NZ sent two representatives from Wellington.

  There was a very strong call from the meeting to have signage at entry points to Turangi and at ferries and airports, for decontamination stations, and for Bio Security NZ to take strong leadership and provide effective action. It emerged at this meeting that Environment Waikato, along with all regional councils, had a person in charge of bio security.

- Advocates secretary wrote to the Minster for Bio Security, the Hon Jim Anderton, with the issues raised at the public meeting
- The Central North Island Didymo Action Group met with members of the Advocates committee to outline the action plan they had devised to address issues raised at public meeting. Their timeframe indicates that practical strategies such as spray bottles, cleaning stations and signs will be in place within the next 3 months. The Chair of the Group, Nic Etheridge from DoC, reported that the Tuwharetoa Trust Board will use its political influence to address the issue of South Island border controls
- Advocates press release "Keep the Central North Island Didymo Free" printed in all major newspapers and in many provincial newspapers. Radio picked it up too.
- Advocates decide to use local radio as a vehicle for getting Didymo awareness information to the public.
- Bob McDonnell of Cognito Advertising writes three scripts for radio and Judy Thomas of Tuwharetoa Radio writes the fourth. (See Appendix 2).
- Advocates approach Bio Security NZ with a request to fund a six month radio campaign on Didymo awareness, using Didymo awareness scripts.
- Bio Security NZ agree to fund the campaign to the value of $3,000.
- Radio advertisement scripts professionally voiced, for the cost of smoked trout, through a contact of Bob McDonnell's, and sent to Tuwharetoa Radio (Triple T) and Radio Network, Taupo. Advertisements are played on 4 stations, 3–4 times a day for six months.

- The first Didymo awareness sign in the North Island goes up. A Turangi motel owner, Ross Baker now a Committee member, erects a sign on his property, facing State Highway 1 saying DIDYMO FREE AREA. An updated version of this sign is still the only anti-Didymo sign in the North Island, with the exception of one at the Wellington terminal of the Picton ferry. (See front cover of this Report.)

June and July 2006

- Advocates members based in Wellington meet with Opposition MP Shane Ardern and with a parliamentary secretary to lobby for political action to contain Didymo. The response was that action has to happen at local level.
- Advocates' president is interviewed on Didymo awareness on Radio Tuwharetoa (Triple T) and Radio Network, Taupo.

August 2006

- A Didymo awareness photograph and brief message are printed on the 2006 Taupo fishing license
- Advocates convene a second Didymo Awareness meeting for the public. The Tongariro River Bridge Fishing Lodge provides the venue and Bio Security NZ provides travel costs for the guest speaker, Dr Barry Biggs, a lead Didymo researcher from NIWA, who was the keynote speaker at the world's first Didymo conference in Montana USA.

September and October 2006

- DoC and the Central North Island Didymo Action Group launch their "Say No to Didymo" Campaign. Hundreds of spray bottles and cleaning stations are distributed to accommodation providers, guides and fishing shops.
- Genesis erects, on behalf of Bio Security NZ, Didymo awareness signs at key access points on the Tongariro River.

December 2006

- Advocates' president attends Didymo meeting, convened by Meridian energy, in Christchurch. (See Report: Appendix 3.) Dr Biggs presents his research findings to date, including new information about felt soled wading boots holding live Didymo cells long after drying and despite the recommended check-clean-dry process.

2 Radio scripts for Didymo awareness campaign

These were broadcast by Radio Tuwharetoa (TripleT) and by Radio Network, Taupo over six months June–December 2006. The first three scripts came from Bob McDonnell:

1. Awareness

(30 seconds)
Right now the rivers and lakes in our region are free of the invasive algae – Didymo, but for how much longer?
If Didymo takes hold, it could seriously damage our waterways, recreational activity and tourism.
Whether Didymo reaches North Island waterways – or not – is up to us.
All it takes is a drop of water from one waterway, to spread it to another – so always thoroughly check, clean dry your equipment or boat.
By doing so, you could help keep our beautiful waterways Didymo free.

For more info, visit biosecurity.govt.nz

2 Dangers

(30 seconds)
If the invasive algae Didymo takes hold in our rivers and lakes we'll all be a lot worse off.
Our rivers will become clogged, our precious ecosystems and fisheries will suffer.
And we'll no longer enjoy the pure water and the fishing we have always taken for granted.
Businesses will suffer too.
Whether Didymo reaches North Island waterways – or not – is up to us.
If you're fishing, kayaking, boating or tramping between different rivers and lakes, always check, clean, dry your equipment or boat.

For more info, visit biosecurity.govt.nz

3. Cleaning

(30 seconds)
You can prevent Didymo from getting into our rivers. It's simple to check, clean, dry.
When you come out of a river, remove any sort of weed from any fishing, tramping or boating gear.
Then clean anything that's wet from the river by spraying it for at least one minute with a 5% solution of dishwashing detergent in cold water.
That's 3 tablespoons to a litre of water, or two cup of dishwashing liquid to 10 litres of water.
Carry a spray bottle in the car… and please, use it… to keep our rivers Didymo free.

For more info, visit biosecurity.govt.nz

4. The fourth script was written by Judy Thomas, Marketing Manager at Radio Tuwharetoa (Triple T)

(30 seconds)
Oii, you Didymo… yeahh – YOU Rock Snot!
Keep the *beeep* away from our waters;
We don't want your ugly brown tikô in our Lakes and Rivers – do you hear me!?"
(deep slimey sounding Didymo voice): Awww yeahh chill, I hear ya!

Narrative:
Every Man, Woman, Child and his dog,
Needs to know that the Didymo alga bloom
Poses a huge threat to our life-giving waterways
So, keep it out… don't be a carrier
Check, clean, dry everything every time – even the dog.

(chorus of children): "Didymo Didymo… No No NO!!"

For more info, visit biosecurity.govt.nz

3 Report on Didymo Meeting, Christchurch, 5th December 2006

Heather Macdonald

The meeting was organised by Mike Hamilton of Meridian Energy and was attended by approximately 100 people. Attendees included people from

Ministry of Tourism
NIWA (Barry Biggs)
DoC (including two from Turangi)
Members of South island DoC Advisory Boards
All the Hydro generation Companies
Irrigation Companies
Fish and Game, including Steve Smith from Fish and Game Rotorua
Land Information NZ
Four wheel drive clubs and cross country driving companies
Ngai Tahu Conservation Board
Bio Security NZ staff
Scientists
Washtech Solutions – Noel O'Dwyer, Cambridge
District Council Staff
Regional Council staff, from
– Environment Canterbury
– Environment Bay of Plenty
– Environment Whakatane
– Environment Southland
Kayakers Clubs
Horizons District Council

Summary

The day provided a very good opportunity to exchange and update information, to network and to be confirmed in thinking that Bio Security NZ is essentially leaving it to the regions to act. It provided an opportunity for the Advocates to be on an equal information footing with the other stakeholders in our region. Attending from our region were: Glenn McLean, Tyrone (Bub) Smith from DoC Fisheries Jarrod Bowler from Genesis, Steve Smith from Fish and Game Rotorua.

Key information to come from the day was

- Latest research information from Barry Biggs confirming felt soles as the main vector (the word "vector" is being loosely used to cover movement, direction and force) for Didymo.
- A lot of talk about banning felt soles which are a vector for all sorts of unwanted aquatic nasties around the world.
- Bio Security NZ and NIWA have an incursion response strategy for the North Island. No details given.

- A rapid response strategy has been developed for the Tongariro. DoC Fisheries staff haven't been involved in this. No details given.
- Finding Didymo early is crucial to limiting its spread.
- Dr Barry Biggs said that in order to find it early in the Tongariro water would require testing immediately below every fishing spot every two weeks.
- Glenn McLean assured me that DoC fisheries could manage this testing regime, once trained and equipped.
- The copper solution being trialled as a gemex or control continues to look promising and an application to trial it on a river in Southland has been made to ERMA who will fast track the application.

Report

The purpose of the meeting was to

- review the impact of Didymo
- share knowledge and experience
- discuss the development and management of solutions.

The first speaker was Peter Thompson, Bio Security NZ. Manager, Clearance Work.
He talked about the Bio Security Management Strategy for Didymo.

First he talked about context, and points made were that

- Didymo cannot be eradicated
- it was first found in NZ in Oct 2004
- it was declared an unwanted organism in Nov 2004
- there is a bio security controlled area around the South Island in that the Bio Security Act makes it illegal to knowingly spread Didymo
- we are in an investigation phase, still determining the threats.

He also talked about response and said that

- Bio Security NZ's response in the past has been to try to eradicate a new incursion and if it can't, to step back and hand over to pest control authority. This is the stage they are at with Didymo now.
- Central Government actively wants to play a role, and has developed new bio security regulations.

He said that the response objectives are to

- reduce the spread
- understand the impact
- develop controls.

In terms of slowing the spread he spoke of

- the awareness campaign: Check, Clean, Dry
- the need for personal ownership and responsibility
- regulatory controls, ie:
  - unwanted organism status
  - controlled areas
  - permit regime which allows activities to take place on an infected river, if it is deemed the activities have to take place.

Next he talked about surveillance and said that surveys and detection techniques have been developed, with operations including river patrols, surveillance at ports, events advice.

In terms of public awareness, he said that in Nov 2005 the Check, Clean, Dry campaign was launched. The campaign was consistent with DoC's messages re aquatic pest awareness. The focus is now moving to a more targeted research based campaign aimed at high risk groups.

The impacts he mentioned were:

Economic
Estimated at the start of the campaign to be between $58 -$258 million over 8 years from 2005 to 2012, including commercial, recreation and tourism costs, in the absence of controls.

Note: there was a great deal of criticism of this projection as being too light and Bio Security NZ agreed to review and revise.

Ecological
ecosystem diversity, dissolved oxygen and habitat effects.

Aesthetic
The visual pollutant effects, nuisance impact.

Human
The look of the stuff, the odor, but it was noted that there are no significant health risks.

Next he talked about research and modeling, which are necessary if we are to understand Didymo's distribution, its impact and control measures.

Risk mitigating conditions can be imposed and guidelines are available from Bio Security NZ.

Bio Security NZ's view of long term management:

Peter Thompson stressed the need for establishing partnerships, that central government cannot do everything. Bio Security NZ have put a draft long term Didymo management plan together, and this will be handed over to the Pest Management Authority. Bio Security will then step back, as the status of Didymo is now that of a pest that can't be eradicated, no longer a new incursion. Christina Vieglais, a scientist and senior adviser with Bio Security NZ has been coordinating this work on the long term plan. (*I have asked for a copy of this management plan.*) The draft has had limited exposure and will be discussed, by those who have been asked to comment, on 13. Dec. (*Note Our DoC fisheries staff hadn't seen it.*)

Peter Thompson said that Bio Security NZ's role is mainly to provide national coordination of regional initiatives, utilizing existing initiatives where possible, e.g. research by Meridian in conjunction with Bio Security NZ. Fish and Game surveys are providing what he called collateral.

Bio Security NZ is working with 10 regional councils this summer, providing the collateral, to ensure river users are aware of Didymo.

Bio Security NZ is developing North Island contingency plans for two scenarios:

a) if an effective control has been found, and
b) if no effective control has been found.

Christina Vieglais reported that a rapid response strategy has already been developed by NIWA and Bio Security NZ for the Tongariro River. (*Glenn McLean, representing Turangi DoC Fisheries staff had no knowledge of this.*)

In the question time that followed Peter Thompson's talk the following matters were raised.

1 **The issuing of permits**. Under Section 52 of the BS Act permits can be given to allow activities to take place on a Didymo-contaminated river. Kayakers had a permit issued to use the Buller River, an action which Fish and Game Westland were opposed to. Answers to questions showed that
   - The granting of a permit is challengeable only through judicial review
   - Permits are issued by Bio Security NZ's Chief Technical officer. Peter Thompson is the Chief Technical Officer (CTI)
   - the CTI is not required to consult with key stakeholders when deciding whether to issue a permit, but does try to do so.

2 **Prosecuting under the Act** – Ignorance is an adequate defence. A person can be prosecuted under the act for "knowingly spreading Didymo between rivers".
   - There has been no case law yet to define "knowingly".
   - There have been no prosecutions to dated, because ignorance has been successfully argued as a defence.
   - If 4-wheel drive vehicles go through a Didymo river and then through a clean river, drivers cannot be prosecuted if they plead ignorance of the presence of Didymo in the first river.

The next speaker was Rob Phillips, from the Canterbury Regional Council. Rob is Convener of the Christchurch RC's Pest Management sub committee.

Rob Phillips said he has touched base with a number of Regional Councils. He said the responsibilities of the Regional Council are as follows

- Under the RMA: to manage water quality and issue resource consents
- Under the Biosecurity Act: to have a pest management strategy, and to assist in incursion responses nationally.

With regard to incursion responses to gorse, broom rabbits etc, Rob Phillips said, "There is increasing agreement that regions have significant interest in incursion responses being successful. The earlier the pest is managed, the more cost effective and the greater the chance of successful control."

Canterbury Regional Council's role in Didymo action to date

Rob Phillips reported that Canterbury was initially reluctant to get involved and saw Didymo as a Biosecurity accountability issue. But it hadn't become one. And so

Canterbury Regional Council has focused to date on

- awareness and signage
- coordinating the efforts of DoC and Fish and Game
- assisting in delimiting activities
- putting technical people on water quality testing
- putting people on rivers for detection
- looking at what work needed doing, such as research into the impact of Didymo on stream health.

Views expressed from the floor included:

- Slow response – Southland Fish and Game expressed concern at the slow response time to incursions in Southland. The speaker emphasised the need for quick decision making on responses, and the need for funding to cope with Didymo.
- Changing behaviours is not enough. The speaker from the floor was supportive of Canterbury Regional Council, but said raising awareness was not enough and that more incentives were needed to change behaviours
- Collective action – the next speaker said we need to find more effective ways of working with Bio Security NZ, Fish and Game, DoC, etc. That there is a risk of what is happening being too "warm and fuzzy", and commented that a lot is at stake if it goes wrong.

Rob's Phillips's view of long term management:

Rob Phillips spoke of

- the need for national coordination and leadership to make sure things are happening, and the need for accountability
- the need for more incentives for people act. For example what to do in the common case where a tourist wants to fish as much water as possible in a week – do we need cleaning stations? new regulatory tools?
- the need to recognise "high value sites". This was considered to be crucial and presented some hard choices between valuing people's incomes i.e. fishing guides or rafting businesses, and valuing containment and restricting access. DoC and Fish and Game are working on a model in Fiordland based on restricted use of a site deemed to be "a high value site"
- the need to change our attitudes towards waterways. Rob Phillips saw the keys to this

as being good communication in the early stages between all the key parties and a collaborative approach
- the need to develop realistic expectations around what can be achieved.

Rob Phillips's final comment was: "To keep Didymo out of the North Island we need an internal border, and that is a discussion we have got to have." (*Note: That discussion, however, was not followed through during the meeting.*)

Question time that followed ranged across a number of issues:

- The usefulness of trying to keep Didymo out of all our National Parks. Peter Thompson's response to this was that it would need new regulatory tools and awareness and he did not consider it to be a useful approach.
- A question about commercial operators and the potential for litigation and compensation. Peter Thompson said that any restrictions on waterways must apply to everyone.

(Note: He didn't comment on compensation but from morning tea discussion I gather Bio Security NZ has some compensatory funding available.)

- Managing for Didymo must be incorporated into regular activities, as it is in the Canterbury Coast-to-Coast event.
- Cleaning Stations: Time for them to be put on all central routes. A Southland Fish and Game representative said that was no use; they tried that last year on the Haast Road and it didn't work. It is not successful when people are travelling and have their gear packed. Instead, cleaning stations need to target people where they are engaging in the activity.
- "How do we do that?" was the next question, when cleaning stations need to be manned, checked etc. The response was that it's up to individuals to have their own cleaning gear.

Barry Biggs Address

Dr Biggs's address was substantially the same as his presentation to us in Turangi on 30th August, with some new findings about felt soles. His main points included:

- Didymo was first described in the science literature in 1820 on Vancouver Island. Formed major proliferations there and in Western USA.
- Scientists in NIWA did not envisage a spread, but climate change and gene adaptation has made Didymo a problem word wide, and this is a new phenomenon. It had never occurred to NIWA scientists that we could get an invasion.

- Easy to transport micro organisms around the world, for example NZ's mud snail is now in Mid West USA, where areas are solid black with 10 to 50 thousand mud snails per square meter, and it is competing with fish for food.
- NZ is providing information about Didymo to the rest of the world.
- Didymo won't always be in bloom condition; e.g. in Vancouver Island Didymo went off the radar after 10 years or so. It was thought to have gone, and political interest shifted away, but it was found to be still present although not blooming anymore.
- Trout rivers provide exactly the conditions in which it does best.
- Gorse and possums are examples of pests that don't go away.
- Different from other species in that it just keeps growing and attaching to itself. The photo that is on the key Didymo posters of chap holding a clump of Didymo is the accumulation of just 6 to 8 months' growth.
- It manages to pull all the nutrients out of the water column and makes masses out of that.
- Bar graph showing how the guidelines for managing algae levels in rivers proved adequate until 2004.
- Problem is that it blankets the substructure, doesn't allow plants to get up or fish to get down.
- Flood conditions over the past 2 years have prevented monitoring of impact on trout.
- Didymo won't grow in still water. Where washed into a lake it may live for a short time and may drift with the wind a little but won't grow and spread. So not much growth at zero velocity.

Barry Biggs then covered stable river beds, water quality and vectors.

The points he made about stable river beds were:

- If the river bed is not moving then Didymo will survive big changes in water velocity. If the sediment moves you will get movement of Didymo and to form high bio masses will take several months. Bed movement will knock it back.
- So in the Rakaia River the main strand may not nurture Didymo but braided side streams will do so.
- Site specific evaluations are being done.

On water quality:

- Dissolved Oxygen and PH changes brought about by Didymo affect water quality. For example in Didymo water, by lunch time PH levels may have risen to 9.3 and at this level dissolves tissue on gills of fish, and may prevent them from breeding

Barry Biggs stressed that it is fundamental to detect Didymo early.

Barry Biggs presented an overview of the Bio Security NZ sponsored science programme, the components of which are as follows:

Monitoring	Cathy Kilroy, NIWA
Detection	Craig Cary (Waikato University) – genomic detection can pick up Didymo in 1 cell per many litres of water
Delimination	Maurice Duncan, NIWA (assessing risks)
Ecology	John Hays, Cawthorn Institute – contaminates and controls
Survival	Cathy Kilroy, NIWA
Control	Barry Biggs, NIWA

On vectors:

Within catchment areas, key vectors are fishermen, boats, power generation, irrigation.

Between catchments, the vectors are fish, birds, vehicles, hydro and irrigation. Fishermen wanting to fish several rivers in one day are likely to be a primary vector.

New findings:

Barry Biggs had just that week reported on trials to test different types of waders as vectors. As his report had not been peer review by Christina Vieglais, who is managing the work that Bio Security NZ has commissioned from Barry Biggs, it was still somewhat under wraps.

After five hours' drying, after stomping around in a Didymo infected river, all of the boot types listed below had large numbers of Didymo cells:

- a felt sole boot
- a gumboot
- a leather boot
- the boots of neoprene waders

However, after 36 hours' drying, the felt soled waders had approximately three times the number of Didymo cells compared with the leather boot. Gumboot and neoprene waders

had only a small number of cells. The conclusion Barry Biggs made was that the Check, Clean, Dry decontamination procedure does not kill cells within felt soles. The only way to kill Didymo off in felt soles is immersion for 15 minutes or more in at least 50 degree centigrade hot water, but even this is now questionably effective. The findings about felt soles was the big piece of information of the day.

Barry Biggs says that this research shows what most of us have thought all along – that felt soles are likely to be the most significant carrier. Felt soles are the main vector, even after up to ten days' drying, Barry Biggs said. *Note: Barry Biggs also says that his colleagues in the USA have noticed that the invasion of the NZ mud snail has happened since the introduction of the felt sole.*

Didymo control possibilities:

Attacking the stalks will not get rid of Didymo. The stalks are not living and are rather like pieces of No.8 wire. Attacking the growing cells with a biocide that is toxic to Didymo is the only way.

It's easy to kill Didymo with concentrated chemicals, but the challenge is to minimise collateral damage. A copper compound that NIWA designed in collaboration with an industrial chemist in Hamilton has shown good results in tank testing and an application has gone into ERMA to trial this compound in a Southland river. ERMA is going to fast-track the application.

Questions and answer session with Barry Biggs

Mike Bradstock from the Water Rights Trust was angry that the felt sole information was not made public. Another speaker was shocked to hear that he may have been responsible for spreading Didymo, and said that at least an alert could have been given. Barry Biggs and Christina Vieglais said that the information will be out in the next week or two. (*Note: Since writing this report, there have been newspaper articles published.*)

Fish and Game asked, "What are you finding about how vulnerable various catchments/ sites are around already contaminated sites?" For example, Didymo has not spread from the Buller into local streams. The answer was that not a lot of work has been done on this yet, but work has been commissioned from NIWA.

A DoC Conservation Board member asked about other vectors such as water fowl. The answer was that not a lot of work has been done, but we now have sufficient information

to say that humans are the main vector. It was noted that four-wheel drive vehicles used for cross country driving cannot be cleaned underneath and are therefore a problem. By contrast, the majority of water fowl tend to be local inhabitants and tend not to move between streams as people do in a day. Likewise, birds go from rivers to land bases to feed and therefore are unlikely to be carriers, but only a desk study has been done on this.

The research gaps and priorities were noted as

- the effect of Didymo in invertebrates and fish communities – DoC is doing some work on this
- the effect of Didymo on lake water – more qualitative work on lakes needs to be done
- the cost of the control solution and whether it can be produced in sufficient quantity – the copper solution is evidently the cheapest you can get. For example, two times 300 litre tanks could treat a 10 cumec river. For the Tongariro, the necessary amount could be delivered on a truck, but his would be a dose for a river reach, not an entire river system. For example, if Didymo were to be found in the Duchess Pool, two or three reaches might need to be treated.

Further questions from the floor:

Jarrod Bowler from Genesis asked what consultation had been done by Bio Security NZ in developing a rapid response plan. The answer was that an incursion in the North Island at this stage would be handled by Bio Security NZ and NIWA. As time goes on, with more information, other agencies would be involved.

Steve Smith (Fish and Game Rotorua) asked Barry Biggs what his advice was on the frequency of monitoring surveys to detect Didymo at the earliest opportunity and how many sites on a river need to be tested in order to get it early and do something about it. The answer, “Every couple of weeks and the number of spots surveyed would depend on the river system. In the Tongariro for example, Barry Biggs recommended two-weekly testing, immediately downstream of every key fishing site.

I asked what resources would be given to the Central North Island to carry out these surveys. The answer was that Bio Security NZ needs partners to do this work. (*Note: Glenn McLean approached me at the end of this session to assure me that DoC would handle the testing, once staff had been trained by Bio Security NZ and had the appropriate equipment*.)

A person from Bio Security NZ then said that in the Central North Island, 65 samples, all of which were negative, were taken on the 20th November, and further sampling is planned for 20th January and 20th March.

Break-out groups

There were three: Hydro Generation, Irrigation and Recreation and Tourism

I attended the Recreation and Tourism session, chaired by a Fish and Game representative and a tourism industry representative.

Discussion was largely based on personal experiences.

Four actions were suggested, but the first three were not well received:

1. that fishing licences be amended to include information about Didymo, and necessary precautions to be taken, thus removing ignorance as a defence
2. that under s52 of the Biosecurity Act, people moving between Didymo-infected rivers without cleaning their gear be prosecuted
3. a ban on the use of Didymo infected rivers in the short-term until we have a suitable control
4. ban on the use of felt soles.

Summary of the break-out sessions:

Risks, issues and actions.

1 Risks

- Biomasses blocking intakes and damaging systems
- Unplanned power outages
- Economic impact on power generation in NZ
- Energy losses in canals
- Risks to irrigation and other offtakes
- Undermining mitigation agreements
- Endorsing commercial cleaning products, which may mean that the value of ordinary detergents is undermined
- District Councils developing different regulations and a proliferation of information about how to operate in Didymo affected water – coordination needed.

2 Issues

- Some solutions are expensive and efficacy is unknown if Didymo gets into a canal
- Issues will vary according to specific generator type and status
- Leadership and coordination with key stakeholders – need for real clarity of roles, boundaries and funding among Bio Security NZ, regional councils, and industry
- Clarity in relation to the RMA, versus the Biosecurity Act, to identify conflicts
- Consent compliance issues, with reference to s52
- The need for increased pubic awareness and behaviour change
- How to clean four-wheel drive vehicles and felt soles
- New regulatory tools
- Clauses on licences
- Prosecutions under s52
- Better border control
- Industry needs to know if information is available from Bio Security NZ for research, if not industry will do it themselves

3 Actions

- Ban felt-soled wading boots
- Find out about methods of cleaning the underneath of four-wheel drive vehicles
- Greater industry involvement in long-term strategy development
- Need to re-visit Bio Security NZ's original economic impact analysis
- Share industry knowledge and ideas
- Individual generators need to develop risk analysis and responses
- Apply for Bio Security NZ permits as required and appropriate
- Early detection and response
- Understand the suitability of gemex (the copper control solution)
- Didymo lake survival and transfer research needs to be done.

Final comments

Christina Vieglais reported that the management of Didymo through the long-term management plan that is being developed will now be handed over to the pest control section of Bio Security NZ, because, now that Didymo has been in NZ for more than two years, it is no longer considered as a "new invasive species".

Christina Vieglais says Bio Security NZ welcome feedback.

4 Report on Planting for the Future

Jen Shieff and Eric Wilson

The project

The staged project was undertaken by the Advocates with funding from the Waikato Conservation Environment and Ecological Enhancement Trust (WCEET). Stage One took place in 2006.

The project's aim is to conduct a clearing and planting project to enhance the natural beauty of the Tongariro River Reserve, to stabilise the riverbank and create cover for trout. The project partners are the Department of Conservation (DoC) and it was the vision of the Advocates that this would be a community project.

Stage One: Activities in the year to 31 December 2006

In January 2006, Dave Lumley of DoC (Turangi Area Manager) ordered plants from the Taupo Native Plant nursery for planting in May. This early order meant that when planted in May, plants were of a suitable size to give them a good start.

In late April 2006 a group of some 30 volunteers and DoC workers and a Prison group worked to clear the area to be planted. The following week, planting was carried out, involving local volunteers and DoC staff.

Meeting WCEET's requirements

The project contributed towards the identification of:

i) important habitats and/or species within the Taupo and WaikatoRiver catchments, their past, present and likely status in the future;
ii) the threats that might confront them, and practical means by which these threats could be effectively reduced or overcome; and
iii) practical means for enhancing these habitats and/or species.

Partnership with DoC

The Department of Conservation, responsible for riverbank management, developed a planting plan and we worked to that plan.

With the assistance of DoC, who provided a truck for the exercise, some 10 truckloads of weeds and rubbish were removed from the planned area.

Community involvement

The local community has been kept informed of the plans developed by DoC and the Advocates and there has been regular publicity about the Project. More than 20 volunteers arrived on clearing day and 12 on planting day a few days later. Community members are enthusiastic about the project and keen to carry on with Stage Two.

An unexpected benefit and a good relationship for the future

We sought and gained co-operation from Rangipo Prison management with the result that we had a team of supervised prisoners to clean up the areas to be planted during Stage Two. Prisoners sprayed Blackberry and Montbretia, which are the two major weeds we are dealing with and we have had a positive response from Prison management who are willing for prisoners to participate in the next part of the programme as well. The inmates were cheerful and willing workers who thoroughly enjoyed the activity and were a pleasure to work with. Their enthusiasm and co-operation from Prison management meant that we used them for a total of 10 days instead of the scheduled two days. This has given us a good base for 2007.

Time and budget management

Stage One was completed on time and within budget. Two advantages were (1) that DoC had an arrangement with the Taupo Native Plant Nursery which meant we could take advantage of their significant discount; and (2) that Prison labour meant that we were able to achieve more than originally planned.

Planting

In all we planted 350 plants and a number of native plants which were growing as seedlings in our gardens such as Karamu and Puahou (Five Finger) and Kowhai.

The plants were:
40 Phormium cookianum
40 Toetoe
60 Coprosma robusta (Karamu)
50 Cordyline australis (Cabbage trees)

30 Kunzea ericoides
60 Pittosporum colensoi (Black Mapou)
30 Sophora tetraptera (Kowhai)
20 Hebe stricta
20 Leptospermon scoparium (kanuka)

Monitoring and maintenance

We have been heartened by the concern shown by people who live in property adjacent to the river and have kept their promise to see that the plants have had a good start, staking where necessary and keeping plants free from weeds. Regular checks of the planted area have shown that more than 90% of the plants are growing well.

The outcome of the project to date

What we have achieved is:

1. An increased number of native plants;
2. An enthusiatic group of Turangi residents keen to continue the project;
3. A good rapport with the Prison who are willing to co-operate with further work; and
4. More than double the original proposed area has been cleaned up.

We have been encouraged by the positive response from track users.

The plantings at this time are still small and there is no change noticed as yet in the birdlife nor in the amount of shelter for trout.

The future:

At the time of writing this report (February 2007) we understand that Environment Waikato is to let a contract for an extension of the stopbank from the Major Jones swing bridge to Poto Street with the work to be completed in March 2007. Planting for Stage Two and beyond will be planned in a consistent way for the whole of the River Reserve.

DoC is to draw up a planting plan for Stage Two, which is scheduled to begin in April 2007 and focus on the eastern (river) end of Taupahi Reserve. Ang Paget is taking an interest in this part of the project on behalf of DoC, along with Dave Lumley who is managing the project for DoC.

There is already young planting in this area and with the assistance of our group, community and Prison we propose to clean up this river end of Taupahi Reserve by freeing the plants of the constriction of blackberry and other weeds, prior to planting.

We are grateful for the community support and involvement, and that of the WCEET, and we regard this project as a successful partnership between the Advocates and DoC.

After Stage Two, the next stage(s) will be to complete clearing and planting downstream from Taupahi Reserve, so that during 2008, the whole river reserve from the Major Jones footbridge downstream to the State Highway Bridge will be cleared of undesirable plants and re-planted according to DoC's plans. Ongoing maintenance is required and this is built into our planning.

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