Appendix 8:

Communications Strategy
Communications Strategy

Acid Sulfate Soil Priority Investigations for the Lower Hunter River Estuary

Project Background

NSW Department of Primary Industries has been engaged by the Department of the Environment, Water, Heritage and the Arts to undertake a detailed investigation into Acid Sulfate Soils (ASS) in the lower Hunter River Estuary.

ASS is a major threat to coastal water quality and impacts heavily on the Ramsar wetlands and associated values in the Hunter estuary. It has the potential to impact on threatened bird species in particular, as well as reptiles such as the Golden bell Frog that can be found occurring in the Ramsar sites in the Hunter. A number of over-drained wetland sites are responsible for chronic discharges of ASS-related poor water quality. Improved management at these locations is hamstrung by a lack of detailed information in a number of areas, including:

- Elevation of the landscape;
- Hydraulic conductivity;
- Soil conductivity;
- Depth and concentration of ASS in key areas.

This project aims to collect the necessary data to support improved decision-making for mitigating the impacts of ASS soils currently impinging on the Ramsar values within the region.

Note – full details of the project are in the contract agreement between Dept Environment Water Heritage and the Arts and NSW Dept Primary Industries.

Communications Strategy Objectives

This Communications Strategy provides a guide for the project managers and the project Technical Advisory Panel to assist in effectively relaying key messages to stakeholder groups. Specifically, the objectives of the strategy are to:

- Allow a consistent message to be developed and promoted;
- Develop messages tailored towards specific information gaps;
- Enable target audiences to be identified;
- Identify specific roles and responsibilities and timelines for actions;
- Build and enhance partnerships between project partners, landholders and stakeholder groups.

Key Messages

- Define Acid Sulfate Soils and its causes as it relates to:
  - floodplain drainage;
  - floodgates;
  - excavation;
  - drought.
- Identify the key ASS implications and environmental issues, including:
  - water quality problems;
  - declines in soil health and agricultural productivity;
  - detrimental impacts on fish, oysters and estuary health.
- Ways of addressing these issues, including:
  - ASS priority investigation project;
  - modification/ management of floodgates;
• infilling/ shallowing of drains;
• reflooding backswamps.

• Highlighting the relationships between ASS and other NRM issues within the Lower Hunter floodplain and estuary, particularly:
  • protection of Ramsar wetlands and threatened species;
  • sustainable development on the floodplain.
• Promoting the outcomes and recommendations of the 'ASS Priority Investigations Lower Hunter River Estuary Project'.

Target Audience

Three audience groups have been identified, and the table below lists the specific types of audiences.

| Stakeholders                  | • Landholders at ASS assessment sites  
|                              | • Technical Advisory Panel Members  
|                              | • Ramsar site managers  
|                              | • Kooragang Wetland Project  
|                              | • Fishermen (recreational and commercial fishers in the Hunter estuary)  
|                              | • Local Councils (Port Stephens Council, Newcastle City Council)  
|                              | • Hunter Central River Catchment Management Authority  
| General Community             | • Floodplain farmers and landholders  
|                              | • Visitors  
|                              | • Residents  
|                              | • Attendees at Tocal Field Days and at other workshops  
| Government                   | • Local Councils  
|                              | • State Government (DPI, DWE, DECC, CMAs)  
|                              | • Federal Government (DEWHA)  

Maintain Links with existing Programmes:
• Coastal Catchments Initiative and Water Quality Improvement Plans (DEWHA)
• Bringing Back the Fish Program (DPI)

Communications Activities, Timing and Responsibilities

Achieving the objectives of the communication strategy is primarily the responsibility of the Project Manager, but overseen by a Technical Advisory Panel. The table below details activities, timing and responsibilities.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Timing</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| Steering Committee meetings and teleconferences | First meeting 3 April.  
|                                         | End of project teleconference Oct 08.  
|                                         | And others as required.                                                 | DPI to convene,  
|                                         | Technical Advisory Panel members to participate and contribute.          |
| Wet pasture management / ASS workshops for landholders (total 4) | 1. Tocal Field Days 1-3 May 08.  
|                                         | 2. Kooragang Wetlands 28/5  
|                                         | 3. Tocal College 29/5  
|                                         | 4. Salt Ash 29/5                                                        | DPI to convene/ coordinate to coincide with other events. |
| Project Updates in Assay                | At completion of project.                                               | DPI to coordinate with                               |
## Communications Strategy

<table>
<thead>
<tr>
<th>Activity</th>
<th>Timing</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>newsletter</td>
<td></td>
<td>National ASS Officer.</td>
</tr>
<tr>
<td>ASS Investigation Report (detailing assessment outcomes and management recommendations)</td>
<td>Draft May 08, Final July 08</td>
<td>DPI to draft and circulate to Technical Advisory Panel members for comment.</td>
</tr>
<tr>
<td>Detailed mapping (identified project areas, plus Kooragang Island and Shortlands Wetland core ASS areas maps)</td>
<td>Following LiDAR and soil assessment and analysis.</td>
<td>DPI in conjunction with DECC.</td>
</tr>
<tr>
<td>Website project information</td>
<td>To be updated as required.</td>
<td>DPI</td>
</tr>
<tr>
<td>Print media (media releases, DPIs Newstreams newsletter)</td>
<td>Media release as project progresses. Launch of project in next quarterly edition of Newstreams.</td>
<td>DPI Local media</td>
</tr>
</tbody>
</table>

### Evaluation and Reporting
- Measures of success as outlined in the contract.
- Updates on communications activities in milestone reports provided to the DEWHA.
- Updates provided to the Project Steering Committee at meetings/teleconferences.
Appendix 9:

Communications Achievements
1. Technical Advisory Panel

In the early stages of the project a Technical Advisory Panel was established, with representatives from key stakeholder agencies and groups, as detailed below:

- Port Stephens Council
- Newcastle City Council
- NSW Dept of Environment and Climate Change
- Hunter Central Rivers CMA
- Hunter Wetlands Centre
- NSW Department of Primary Industries

The first meeting of the Technical Advisory Panel was convened on 3 April 2008 at Kooragang Wetlands Information Centre, at which the five sites for the study were chosen. Throughout the project DPI has kept the Technical Advisory Panel informed of project progress and advice was sought where needed.

2. Communications Strategy

A Project Communications Strategy was developed in the early stages of the project, providing a guide for the project managers and the project Technical Advisory Panel to assist in effectively relaying key messages to stakeholder groups. Specifically, the objectives of the strategy are to:

a. Allow a consistent message to be developed and promoted;

b. Develop messages tailored towards specific information gaps;

c. Enable target audiences to be identified;

d. Identify specific roles and responsibilities and timelines for actions;

e. Build and enhance partnerships between project partners, landholders and stakeholder groups.

The Communications Strategy (Appendix 3) listed activities, timeframes and responsibilities, as a guide for providing effective communication of project messages and outcomes.

3. Workshops

a. Tocal Field Days 2-4 May 2008 (3 days)

Tocal Field Days is an agricultural expo held annually at Tocal Agricultural College in Paterson. The Field Days are to promote sustainable rural production and community and business development. This year’s field days attendance over 3 days was 27000 people, including approximately 120 school children on Friday.

The DPI tent was one of 400 exhibitors. The tent consisted of a variety of stalls relevant to primary industries, eg Wet Pasture Management, Fish Friendly Farms, Aquaculture, Minerals, Climate Change and a range of others. The tent had a presentation area, where Wet Pasture Management and Acid Sulfate Soils talks were given once daily.

Held at Sydney at Newington Armoury, Homebush (organised by the Australian Museum), Science in the Suburbs is an event held for Sydney school children. Attendance over 2 days was 1200-1300 each day.

The DPI display was one of 20 similar displays. The display had a demonstration of soil acidity with a pH test kit and the peroxide test for sulfides used to identify acid sulfate soils. A mounted profile of an acid sulfate soil with a piece of corroded concrete was used to demonstrate the impact of acid water coming from the soil.
c. Wet Pasture Management Workshops, 28-29 May 2008

Three workshops were held in the Lower Hunter at Kooragang Wetlands Information Centre, Tocal College and Salt Ash Community Hall. The Workshops were aimed at farmers, landholders and land managers in the lower Hunter valley, particularly those with farms on the floodplain. Talks/presentations at the workshops included:

- **Wet Pasture Identification** – providing workshop attendees an opportunity to see firsthand wetland plant samples and have a plant species from their property identified by bringing along a specimen;
- **Wet Pasture yield** and quality results from wetland trials were presented by DPI’s Carol & Harry Rose, who have been researching the value of various wet pasture plants with respect to their protein content, digestibility and metabolic value;
- **Acid Sulfate Soils** – their identification and management, including a display board featuring an example of an acid sulfate soil core.

Invitation flyers were posted to local landholders (contacts provided by Port Stephens Council), and people who registered further interest at Tocal Field Days. The Workshops were also advertised in the local papers and via a DPI Media Release.

A total of 43 people attended the workshops, consisting of landholders, land managers, government agency staff as well as people with a general interest.

4. Conferences

The results from this study will be presented at relevant conferences and other relevant NRM conventions. To date, a presentation on this project has been accepted for the upcoming NSW Coastal Conference 2008 to be held at Wollongong 4-7 November 08. Other opportunities to present at conferences will be pursued as they come available.
Workshops: The Value of Wetland Grazing

NSW Department of Primary Industries (DPI) is hosting a series of workshops about wetland/swamp grazing, also known as wet pasture management. The FREE workshops are aimed at farmers, landholders and land managers in the lower Hunter valley, particularly those with farms on the floodplain. Each workshop will be held in a different part of the Hunter’s floodplains.

DPI's Carol & Harry Rose have been researching the value of various wet pasture plants with respect to their protein content, digestibility and metabolic value. Participating farmers on the mid-north coast have been able to considerably boost production by promoting these species in suitable areas.

The workshops will cover a range of topics relevant to farming on the floodplain:

- **Wet Pasture Identification** - identify your plant species, bring along a specimen;
- **Wet Pasture yield** and quality results from wetland trials;
- **Acid Sulfate Soils** - their identification and management;

The workshops will give you an opportunity to see firsthand wetland plant samples, acid sulphate soils and how to manage your farm to benefit both productivity and the environment.

**Workshop Dates:**

1. **Wednesday 28 May 2008**  
   Kooragang Wetlands Information Centre, 10am - 3pm (includes free lunch)

2. **Thursday 29 May 2008**  
   North Court Room 3, Tocal College, 10am - 3pm (includes free lunch)

3. **Thursday 29 May 2008**  
   Salt Ash Hall, 5pm - 8pm (includes free supper)

For more information on workshop schedules and location details, phone **02 4916 3837** or email Jenny.Fredrickson@dpi.nsw.gov.au

Please RSVP for catering purposes by Friday 23 May

Funding for this project is provided by the Department of Environment Water Heritage and the Arts, under the Coastal Catchments Initiative.
Photo: Kooragang Workshop, wetland plant identification talk by Harry Rose 29/5/08 (source: J Fredrickson)

Photo: Koorgang City Farm field trip 28/5/08 (Source: J Fredrickson)
Photo: Tocal Workshop, wetland plant identification 29/5/08 (Source: J Fredrickson)

Photo: Tocal Workshop field trip to Racecourse Lagoon 29/5/08 (Source: J Fredrickson)
5. Media outputs

A media release was produced to advertise the Workshops. The media release was circulated to local media outlets, as well as a paid advertisement. The media release and resultant articles are shown below.

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**News Release**

20 May 2008

Lower Hunter wetland pasture workshops
A series of free workshops on wetland pasture management will be held in the lower Hunter in late May to help stock owners get the most out of grazing swampy areas.

NSW Department of Primary Industries (DPI) Conservation Management Officer, Jenny Fredrickson, said the workshops were designed for farmers, landholders and land managers in the lower Hunter valley, particularly those with farms on the floodplain.

“Each workshop will be held in a different part of the floodplain, at Kooragang Wetlands on May 28, and Tocal College and Salt Ash on May 29,” Ms Fredrickson said.

“A range of topics relevant to farming on the floodplain will be covered in the workshops including pasture identification, pasture yield, pasture quality and acid sulfate soils.

“You can bring along a plant specimen and have it identified.”

Ms Fredrickson said the results of wetland trials would be presented to provide accurate information on pasture yield and quality.

“The DPI has been researching the value of various wet pasture plants with respect to their protein content, digestibility and metabolic value,” she said.

“Participating farmers on the mid-north coast have been able to considerably boost production by promoting these species in suitable areas.

“The workshops provide an opportunity to see firsthand wetland plant samples, acid sulfate soils and how to manage your farm to benefit both productivity and the environment.”

The Value of Wetland Grazing workshops are funded by the Federal Department of Environment Water Heritage and the Arts, under the Coastal Catchments Initiative.

The workshops will be held at:
- Kooragang Wetlands Information Centre (near Hexham) on Wednesday 28 May 2008, 10am – 3pm (includes free lunch)
- Tocal College, Paterson on Thursday 29 May 2008, 10am – 3pm (includes free lunch)
- Salt Ash Community Hall on Thursday 29 May 2008, 5pm – 8pm (includes free supper).

For more details contact Jenny Fredrickson on (02) 4916 3834, or Jenny.Fredrickson@dpi.nsw.gov.au Please RSVP by Friday 23 May.

MEDIA CONTACT: Tom Braz 6391 3579, 0428 256 596
WORKSHOPS ON
‘The value of wetland grazing’

NSW Department of Primary Industries is hosting free workshops on wet pasture grazing and management aimed at farmers, landholders and land managers in the lower Hunter valley, particularly those with farms on the floodplain.

The workshops will cover a range of topics, eg
• Wet pasture identification—identify your plant species, bring along a specimen
• Wet pasture yield and quality results from wetland trials
• Acid sulfate soils—their identification and management.

Wed 28 May 08, Kooragang Wetlands Info Centre, 10am—3pm
Thu 29 May, North Court Room 3, Tocal College, 10am—3pm
Thu 29 May, Salt Ash Hall, 5—8pm

More information and location details, phone 02 4916 3834
or email jenny.fredrickson@dpi.nsw.gov.au

Please RSVP by Friday 23 May.
ASS Investigations in Lower Hunter Estuary Wetlands

A project on the NSW Lower North Coast, entitled ‘Acid Sulfate Soils Priority Investigations in the Lower Hunter River Estuary’, has recently been completed by NSW Department of Primary Industries. The project was funded by the Australian Government’s Coastal Catchments Initiative.

Soil coring, profile description, laboratory analysis, and tests for soil hydraulic conductivity ($K_{sat}$) and electrical conductivity (EC) were carried out to assess acid sulphate soils (ASS) distribution and severity in the Lower Hunter wetlands. In addition, elevation information (LiDAR) was used to update the Acid Sulfate Soil Risk Maps for the study area.

Study areas included Kooragang and Shortland Wetlands (which are both listed as Ramsar Wetlands of International Importance), as well as nearby Tomago Wetland, Hexham Swamp and Fullerton Cove. Analyses of soils have revealed that ASS occur in all five of the sites, at differing degrees of severity. Waterlogging of soils has reduced the amount of stored acid in the profile at many sites.

Fullerton Cove and Tomago Wetland are considered the highest priority sites for ASS management of the five wetland sites tested, because there is more actual acid stored in the soil profile.

At both sites opening the floodgates is recommended to reintroduce tidal water into the drains to neutralise and dilute acid before it reaches the estuary. This recommendation builds on an existing project that is proposing to open one of Tomago Wetland’s floodgates.

At Hexham Swamp and Shortland Wetlands, high risk areas are concentrated near low lying areas near Ironbark and Fishery Creeks. The study’s recommendations support an existing proposal to open Ironbark Creek floodgates to restore tidal flushing into these creeks and manage acid leachate.

Kooragang Wetland (Ash Island) is considered a medium ASS risk site. Areas to the north of the wetland have high stored acidity within the soil profile, while permanently inundated ponds in the south are actively accumulating sulfides on the soil surface. Maintaining or enhancing the natural water management regime (tidal influence without artificial drains) is a priority at this site.

NSW DPI is looking to work with landholders and land managers to implement recommended ASS management options in the future.

For further information contact Jenny Fredrickson, NSW Department of Primary Industries on (02) 4818 3834 or jenny.fredrickson@dpi.nsw.gov.au.
Acid sulfate soils project in the Hunter Estuary
NSW DPI has recently been engaged by the Federal Department of Environment, Water, Heritage and the Arts to complete a project entitled “Acid Sulfate Soils Priority Investigations in the Lower Hunter Estuary”. The project aims to carry out site specific soils and water testing to locate acid sulfate soils hot spots in the lower Hunter. This knowledge will be used to make recommendations for improved land management and provide options for on-ground rehabilitation works to mitigate the impacts of acid sulfate soils. To date, site assessments have been completed and the results from soil and water testing are being compiled. In late May NSW DPI held a series of workshops for landholders in the lower Hunter estuary (at Kooragang Wetlands, Tocal and Salt Ash) to raise awareness of the risk of acid sulfate soils and promote actions such as native wet pasture management for appropriately managing acid sulfate soil prone floodplains.

Contact: Jenny Fredrickson NSW DPI 4916 3834

Acid sulfate soils in the lower Hunter
Investigations into acid sulfate soils at five sites in the Hunter River estuary have found that the soils occur at all sites. NSW DPI staff tested soil and water quality in the Lower Hunter wetlands, Kooragang and Shortland wetlands (both listed as Ramsar Wetlands of international importance), Tomago Wetland, Hexham Swamp and Fullerton Cove. In addition, elevation information (LiDAR) was used to update the acid sulfate soil risk maps for the study area. NSW DPI will work with landholders and land managers in the lower Hunter to reduce the impacts of acid sulfate soils through activities such as floodgate management. For more information about this project contact Jenny Fredrickson at Jenny.Fredrickson@dpi.nsw.gov.au. The project is funded by the Australian Government’s Coastal Catchments Initiative.