

Accountability in action – responsible disbursement of grants for environmental works on farms

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Background and context to NSF

The project 'Nutrient Smart Management', normally referred to as 'Nutrient Smart Farms' (NSF), was delivered by NSW Department of Primary Industries (DPI) in partnership with Hawkesbury Nepean Catchment Management Authority (HNCMA) (NSW DPI 2011). It was one of seven projects of the Hawkesbury Nepean River Recovery Program (HNRRP), which was funded by the Australian Government's 'Water for The Future' program. A sister project was Water Smart Farms (WSF), also carried out by DPI. WSF & NSF were collectively called the 'Smart Farms' projects. They began in April 2009 and concluded in September 2011. The projects operated in the lower Hawkesbury Nepean (HN) catchment, west of Sydney. The focus for funded on-ground works was commercial farmers but NSF engaged all types of rural landholders in the project area.

The primary objective of NSF was to reduce the export to the river system of total nitrogen (N) by 27 t/yr and total phosphorus (P) by 6 t/yr. The objective of HNRRP was to improve the health of the Hawkesbury Nepean River by increasing environmental flows and reducing nutrient export to the river system.

The range of project activities

NSF disbursed grants for on-ground works that reduce losses of N and P at farm boundaries and therefore contribute to improved catchment health. NSF also provided free soil and water testing, training and extension services to local farmers – with the aim of improving nutrient management.

A research component focussed on nutrient movement on dairies and the effects of using compost in field vegetable production. The complementary HNRRP project 'Nutrient Export Monitoring' (NEM), led by NSW Office of Environment and Heritage (OEH) provided useful data. The NEM project intensively monitored some of the NSF sites.

Monitoring, Evaluation & Reporting (MER) was a feature of the entire project. All on-ground works involved 'nutrient calculations' (see later) and a final report, case study and farmer survey. All group events were evaluated.

Types of on-ground works that were funded

These included:

- Fencing to exclude cattle from natural waterways, often in combination with re-vegetation
- 'Nutrient retention ponds' and earthworks to control runoff on horticultural farms
- Recycling of greenhouse drainage water
- Soil conservation works (e.g. halt gully erosion or bank slumping)
- Upgrades to dairy effluent systems
- Supply of greenwaste compost, to improve soil condition and water infiltration
- Modified fertiliser application (e.g. fertigation in an orchard)
- Improved poultry manure storages on horticultural farms.

Project Management

NSF & WSF were led by a Project Manager with the assistance of three Team Leaders and approximately 20 additional full or part-time staff in DPI and HNCMA. Around eight Full-time equivalent staff worked in NSF. The seven HNRRP projects were managed by the Office of the Hawkesbury Nepean (OHN). The Project Manager represented NSF and WSF on the HNRRP steering committee and was constantly in contact with OHN, DPI and HNCMA management and the funding body.

The Smart Farms projects had their own steering committee made up of representatives of various farmer groups, DPI, HNCMA, OHN and the Australian Government. This committee met

on average quarterly - and more regularly early in the project. The Smart Farms management team had weekly teleconferences for most of the life of Smart Farms.

Preliminary activities between writing the NSF project proposal and the formal start of the project in April 2009 allowed work to begin at a rapid pace. We focussed on establishing clear processes and promoting NSF to farmers and other stakeholders, such as rural contractors.

The most important documents developed were:

- The NSF literature review
- Expression of Interest (EOI) Form
- Farmer database with contact details and comments
- Farmer guidelines to obtaining a grant
- Project proposal form
- Proposal assessment matrix
- Contract of works
- Various spreadsheets for tracking the progress of proposals and actual projects
- Specifications and tender for the supply of compost
- Templates for milestone reports
- Templates for Final Reports and Case Studies for individual on-ground works

The literature review of nutrient losses from farms focussed on runoff from diffuse sources. This guided the range of activities, priorities for action and justification of the grants. Once entered into the Farmer database, the details on the signed expression of interest form allowed project staff to contact that farmer. Particularly in the early stages of the project, the database was used to record whether a particular farmer had been visited and what activities they were interested or involved in. The database allowed for the promotion of events, including by bulk email and post distributions, and could be queried by many categories including industry group, locality and surname.

The Farmer Guidelines was a five page document with an outline of NSF, list of eligible and ineligible activities, map of the project area, assessment criteria and instructions on how to apply for a grant. The project proposal form was a nine page template that contained details of the applicant, land title, budget, risks and 'nutrient calculations'. The description was typically one-third to one-half of a page and there was a property map showing the location and extent of the proposed works. The assessment matrix was a one page spreadsheet that scored projects (very high=5, very low=1) for six weighted criteria, which are listed later. The matrix was confidential and used only by the assessment panel and for general guidance by officers developing proposals.

Centralised electronic libraries were used to share resources amongst project staff. Two libraries housed latest versions of project material, such as templates, milestone reports and minutes of meetings and these were accessible to DPI project staff. Considerable attention was paid to the unambiguous naming of files.

Two powerful databases used by HNCMA were critical to the implementation of NSF incentive grant contracts. Catchment Information Management System (CIMS), used to store non-spatial information, and Land Management Database (LMD), used to store spatial information, are not discussed in this paper.

Promoting NSF

NSF and WSF were extensively promoted using general and targeted field days, meetings arranged by others (e.g. an industry group's AGM), mass media, industry organisations, mail outs and word-of-mouth. Many of the Smart Farms project officers were extension staff well-known in the project area. Events were sometimes targeted to a particular sub-catchment or locality. More often, they were targeted to a particular industry group, such as dairy farmers, turf farmers or greenhouse vegetable growers. The project team included bi-lingual Project Officers who assisted Arabic, Cantonese and Vietnamese-speaking farmers. This was of particular benefit as there is considerable ethnic diversity in the project area, particularly in relation to vegetable growers. Posters and other promotional material and standard templates for publications and presentations were developed in the first few months of Smart Farms.

Developing proposals for funding

Potential grants were detailed in proposals and assessed by a panel of three, being the Project Manager (Smart Farms), Team Leader (Incentive & Information Program) and Catchment Coordinator, HNCMA. Grants ranged in size from \$1 500 to \$120 000, with most in the range \$5

000 to \$25 000. Farmers were required to make contributions, in cash or 'in-kind' (e.g. labour for additional maintenance), that at least matched the size of the grant.

A typical scenario was that a farmer approached the Smart Farms team at a promotional event, requesting a farm visit. Depending on the expertise and availability of staff, one or more Project Officers made the visit and discussed possibilities with the farmer. Frequently, a decision was made that the proposed works did not meet NSF objectives. For example, the potential nutrient export reductions appeared small or absent. In the case where appropriate works, adequate in-kind contributions and an indicative budget that was attractive to the applicant were identified, a proposal was then developed. It was up to the applicant to obtain quotes for items. In more than half of cases where suitable works were identified and the applicant was agreeable to enter a contract, a proposal was successfully developed.

Draft proposals were revised in consultation with the applicant and Team Leader, NSF as details were finalised. Once agreement on a suitable proposal was reached, it was sent to the NSF assessment panel. This panel met once per month and began meeting five months into NSF.

Assessing proposals

The six criteria used to assess proposals were:

- Technical feasibility
- Project sustainability – will the works result in a short or long term improvement?
- Applicant's resources and commitment
- Project focus – on environmental benefit as well as private benefit
- Connectivity to waterways
- Comparison of the size of the grant to a 'nominal value' of the expected reductions in nutrient export (see below).

Nutrient calculations and the 'nominal value' of works

In order to meet its nutrient targets and stay within budget, NSF needed to ensure that it did not consistently spend more than a given proportion of its budget to achieve less than the same proportion of its nutrient reduction targets (of 27 000 kg N and 6 000 kg P p.a.). After first applying a 'safety factor' of one-third of the grants budget, the remaining amount was simply divided by the kilogram targets to derive 'nominal values' of \$35/kg N and \$150/kg P. These values were then used in one of the six assessment criteria for proposals. By multiplying the expected reduction in nutrient exports by a value for those losses of N & P, a nominal value was determined for the whole proposal. This value was then compared to the size of the requested grant. 'Nutrient calculations' to determine current exports of N & P and the likely reductions in nutrient loss once works were completed are the subject of an accompanying paper.

The works contract and payment

Approved projects were developed into contracts that normally ran for ten years. Contracts were between HNCMA, which disbursed all grant monies, and applicants. All landowners were party to the contracts. Where the applicant was not the landowner or not an owner of all the lots where work would occur, a 'three-party' contract was developed. In most cases, a simpler 'two-party' agreement was produced.

Contracts contained standard clauses relating to doing the specified works to a suitable standard, having insurance and maintaining the newly-installed infrastructure. The details of the approved proposal, such as budget and description of works, were also placed in the contract.

Farmers tended to be paid one month after they returned their signed contract. For projects deemed low risk and with a grant under \$20 000, they were paid 'up front', that is, before the works commenced. It was the farmer's responsibility to expend the grant funds and complete the works. Applicants were required to keep receipts, a simple diary and document progress of their works, including the use of photographs from defined positions.

Tracking the progress of works

Spreadsheets and CIMS were used to keep track of individual works projects. Progress of NSF as a whole was reviewed via a progress sheet that detailed the numbers of projects approved and under development. This sheet was discussed at the weekly teleconferences. 'Tracking sheets', generated by Crystal Reports from the data CIMS, provided weekly updates of the progress of individual works projects and aspects of NSF as a whole, such as funds expended and reductions in nutrient export calculated to result from works projects approved to date.

What happened

The offer of a substantial grant to undertake on-farm works that made business sense as well as being environmentally responsible was favourably received by many farmers. Despite this, it was generally the NSF Project Officer, not the farmer, who progressed the development of a project proposal. NSF team members were frequently asked to do tasks that were the responsibility of the applicant, such as arrange quotes from likely contractors and find suppliers of materials. Some assistance was provided but decisions on project options were always the responsibility of the farmer.

Several one-on-one visits were often required to design the works in more detail and reassure the farmer that the effort involved was worthwhile. For example, that an extra two hours per fortnight handling dairy wastes would be compensated by more pasture growth in the new dispersal areas and that, regardless of this benefit, responsible stewardship necessitated that effluent be handled so as not to contaminate local waterways.

Farmers' engagement ranged from those who had a clear idea of a potential project and all its components to those who said "Come and have a look and see what you can do" (i.e. visit the farm and identify works that might be funded). Commitment levels ranged from those who set up a separate bank account for their grant and wrote a comprehensive report to those who did the minimum.

The disbursement of grants was not a routine activity for DPI but was for HNCMA. However, the intricacies of developing proposals and funding certain kinds of activity were new to both organisations. Only by actually 'doing the work' did we recognise and then address all necessary aspects of the full range of funded on-ground works. If a farmer's expenses went over budget, the farmer paid the additional costs and, if under budget, the farmer's cash contribution was reduced or unspent funds were returned. When developing proposals, we tried to get a reasonable and accurate budget that minimised the chance of a farmer being out of pocket but, at the same time, ensured their eventual contribution was adequate and also stretched our bucket of money further. It was pleasing to see how often project budgets were within a few percent of actual expenditure, as detailed in receipts.

Staged payments, typically 80% up front and 20% at full completion, were used for larger and riskier projects. One-quarter (30) of the non-compost projects had 80/20 payments and one troublesome project had five staged payments. In hindsight, a greater use of staged payment may have helped control the progress of a few projects. On the other hand, it was helpful to many of our farmers to receive the money for works up front. Overall, the initial payments sped up rather than slowed down the eventual completion of the many on-ground works.

Due to thorough quality control procedures before submission to the NSF assessment panel, very few (<5%) proposals were rejected. However, up to 20% had conditions imposed such as ensuring a permit is obtained for works in a riparian area before the funds are transferred to the farmer. Around 10% of approved projects were later withdrawn by the applicant. In some cases, inadequate consultation could have been a factor – with the farmer never really committed to the project and the NSF team, to some extent, too focussed on 'getting money out the door'. In a few cases, the farmer was uncomfortable to enter into a 10 year contract. Often a generic contract template was provided to committed applicants, to ensure they were aware of requirements.

For each works project, a final report included receipts, the applicant's assessment of the administration of NSF and a statutory declaration. Comments in the report were by exception. For example, to the question 'Has your project varied from what was originally approved?' details were only provided if there were changes. A mandatory site inspection would reveal if the works were complete and operational (e.g. we insisted that machinery be turned on) and the aim of the project achieved.

Three lessons:

1. By having standardised proposal documentation and assessment criteria from the early stages of NSF, potential recipients of grants were treated in an equitable manner.
2. Live databases can be a tremendous resource and they help to ensure a consistent approach is taken by a project team.
3. Repeated, one-on-one contact was often necessary for our clients, who are mostly of non-English speaking background.

References:

NSW DPI 2011. The Smart Farm Projects, Retrieved from: www.dpi.nsw.gov.au/agriculture/resources/smartfarms