Workshop Report

Building Knowledge and Understanding of Audited Self-Management 14 August 2011

Venue: Addington Raceway, Christchurch

Date: Thursday & Friday 11 & 12 August 2011

Attendees: +80 people comprising farmers, irrigators, industry officials, scientists,

regional council, central government

Organisers: Ian Brown (ECan) & Andrew Curtis (Irrigation New Zealand)

Sponsors: Ministry of Agriculture and Forestry

Facilitator: Geoff Henley

Content: This report is divided into sections. They follow the section in the

workshop programme. They are as follows:

S1: ASM definition

This section contains a definition of ASM that emerged from the workshop together with a set of operating principles to guide ASM

S2: Regulatory and community expectations

This section contains brief summaries from each of the presentations to the workshop on this matter. The full presentations are available separately.

S3: ASM key operating criteria

This set of operating criteria covers the principal elements of operating an ASM programme. It is intended as a checklist of criteria and should be read in association with the principles.

S4: The Case for and against ASM

S5: Current industry initiatives

This section contains brief summaries from each of the presentations to the workshop. The full presentations are separately available

S6: Issues and unresolved considerations

This section discusses issues that were raised but unresolved and which would benefit from further exploration.

S7: Recommendations and future action

Section 1: Definition of ASM

The workshop considered definitions of ASM and while it did not finally settle on a definition, the following outline captures the main considerations.

At its very simplest it was described as a tool for managing issues, problems and solutions. It has a focus on knowledge, to both understand issues and find practical solutions, as opposed to the traditional command and control compliance model.

Where ASM is associated with consents, it can also be used as a compliance tool through the transfer of day-to-day compliance responsibilities to users under agreed terms and conditions. The same is true where the framework is an industry standard, market requirement or a quality improvement programme.

ASM is a method for demonstrating adherence to community agreed outcomes through the achievement of set management objectives, but it is not a method for the setting of community agreed outcomes. However, knowledge gained from ASM programmes will help to inform and refine community planning processes over time.

ASM assumes a level of enforceability (e.g. consequences for inaction), although incentives for good performance can be a significant part of the enforcement package. In the RMA environment the consent authority – generally a regional council – is the ultimate enforcement agency. However, in the case of an irrigation scheme for example, the consent holder may undertake the enforcement role under agreed terms and conditions. In an industry quality scheme the enforcement agency may be part of the industry organisation and may be subject to contractual arrangements.

A major benefit of ASM is that its outcomes often move beyond compliance and because of its self-directed nature can encourage on-going improvement and development.

Key Operating Principles

Following discussion on the definition of ASM the workshop was asked to identify key principles that characterise this tool. They were defined as follows:

Clearly Defined and Expressed Community Outcomes

Clearly defined and expressed community outcomes are essential for an effective ASM programme. These provide a framework in which the ASM can successfully operate. The outcomes can relate to environmental standards, quality, business enhancement, market requirement or other matters.

The community to which they relate is defined. It may be the public via a regulatory authority, or it may be an industry by way of an industry strategy. ASM is a tool to carry out these outcomes. It is not the place of ASM to set these outcomes, however, it will respond to and inform them over time.

In the same way that outcomes need to be clearly expressed, so too do the implications of inaction, or the unsuccessful operation of a scheme. Such consequences could include failed certification, loss of premium markets, etc.

The point was made that outcomes need to be translated, as far as practicable, right down to the property level so that the business owner or farmer is closely connected to them.

Outcome "creep" was seen as a matter to be aware of. This involves a gradual and sometime imperceptible shift in outcomes. Where this is not transparent it can result in conflict between parties involved.

Besides "community" outcomes there are also individual outcomes. These may be held by the individual ASM participant. They may be aspirational and relate to business expansion and enhancement. Community outcomes tend to be more about compliance, whereas individual outcomes may be about enhancement above minimum standards.

One of the advantages of ASM was seen to be that the users voluntarily took greater responsibility for all outcomes.

Credibility and Trust

ASM needs to be credible to all stakeholders including farmers, industry, regulators, consumers and the wider community. Credibility leads to the development of trust.

Transparency

Transparency is vital and refers to all stakeholders. Note: This does not mean all information is available to all, but that there is sufficient disclosure to demonstrate authenticity. Intellectual property and commercial sensitivities must be accounted for.

Comprehensive

The comprehensiveness of the ASM programme required will be determined by the complexity of the management issues under consideration. Single issues such as the measurement of water takes require a less comprehensive programme. Complex issues such as nutrient management may require consideration across a number of management areas including irrigation, soils, riparian and dairy effluent as well as nutrient management.

Audit

The presence of an 'approved' audit system is a key principle. It is also an operational matter and is dealt with later in the report.

• Collaborative Governance

Collaborative governance is essential for the development of a successful ASM programme. Collaborative governance needs to be reasonably formal. Contracts and agreements (such as MoU's) are essential as they create a sound foundation and prevent individual stakeholders from subverting the process.

ASM can work for individuals but for its true benefits to be realised a collective approach is best. Collectives include groups of farmers in a catchment or an industry.

Collaborative approaches were seen as the antithesis of adversarial approaches which, it was felt, would simply not work in an ASM environment. The point was made that collaboration requires the active involvement of stakeholders and careful definition of who the stakeholders actually are. A wider, rather than narrower definition was supported, though it was noted that there were potentially different levels of stakeholder involvement besides governance.

It was noted that collaborative processes, by their very nature, take longer than others (particularly in the early stages), especially if there is a commitment to early and wider engagement. Clear leadership was also regarded as important because the influence of diverse stakeholders can deflect the purpose of a scheme unless its direction is clear.

It was also noted that collaborative governance should be supported with a reasonable level of formalisation. Discussion groups emphasised the need for well-considered contracts and agreements that would give the ASM scheme a sound foundation.

In this respect it is essential that in each programme there is some form of ASM governance entity that works on behalf of the collective. This ensures good governance and deals with issues of accountability.

• Milestones and Continual Improvement

Milestones in the context of a culture of continuous improvement are essential elements of ASM. Closely tied to outcomes, transparency of those milestones is an important part of building credibility.

Closely related to milestones is benchmarking. While it is not a requirement of ASM effective inter industry benchmarking would have the effect of improving practice.

Flexibility

An adaptable approach is important for success however the degree of flexibility is specific to the programme components. For example, the outcomes, management objectives and audit process need to be tightly set, whereas the operational approaches that might be adopted by the farmer to achieve the outcomes and objectives must be able to adjust to specific circumstances.

Other dimensions of flexibility were also noted. These include the ability to recognise new science and technology and adopt where appropriate. This was seen to include regular review and willingness to critically evaluate schemes at all their stages.

Interoperability

ASM programmes need to be interoperable (for example irrigation scheme and industry market programmes). This will avoid both duplication and cost for all stakeholders.

• Buy-in

Because ASM requires such a significant commitment to good management practice and consistent practices generally, a high level of buy-in is required by

farmers. This is especially important in the early stages but remains important throughout the life of an ASM programme.

Farmers need to feel they have "skin in the game". A high level of commitment is required from all stakeholders for a scheme to work.

It was noted that sometimes late adopters into such schemes lack the commitment of earlier adopters. They behave more as followers. It was felt that schemes required strong induction and support processes to ensure that all those entering understood both the procedures and the culture of the scheme.

• Good Management Practice

Many of the factors outlined in this section relate to good management practice. It was noted that ASM is only really possible in a situation of mature management because of the disciplines that are required to operate it effectively.

Section 2: Regulatory and Community Expectations

This section briefly précis the presentations on this subject.

1. A Legal Perspective – What can and can't be done – former environment court Judge Peter Skelton

- A consent is a prerequisite to use a public resource
- A consent is enforceable and the enforcement agency is generally a regional council
- ASM is an arrangement about what is done and by whom. "It is not an arrangement that allows the environmental outcomes agreed to through a consent to be debated"
- ASM is not a soft option the regional council retains ultimate control
- There is lots of scope for using ASM within the RMA
- It has the benefit of faster behaviour change.

2. An Environment Canterbury Perspective – Ecan Director of Resource Management Kim Drummond

- ASM is part of the ECan vocabulary in the Canterbury Water Management Strategy and the Land Use and Water Quality Project
- ASM is aligned with thinking in the RMA, the Land and Water Forum and fits with NPS's and NES's
- Users are increasingly wanting to employ ASM
- ASM supports collaborative processes around resource use
- It encourages users to go beyond compliance
- In a Canterbury context it leads to better environmental outcomes

3. A Waikato Regional Council Perspective – Chris McLay

- ASM is an implementation tool for RMA and Iwi Settlement legislation
- The powers under both these pieces of legislation remain with the regional council
- ASM falls within compliance activities
- ASM needs to be developed prior to implementation and its purpose needs to be clearly defined
- What are optimum operational levels for ASM individual, small or large collectives, sub-catchment, catchment, industry or sector
- The public interest needs to be maintained
- It is most successful when all parties in a catchment are involved, where potential harm is less, in association with industry codes of practice, where there is a clear link between best practice and outcomes and where policy is simple and unambiguous.

4. An MfE Perspective – MfE's Director of Environmental Regulation Kevin Currie

- ASM has the potential of a national and local role
- It can be community-driven, not just industry-driven
- It needs clearly defined boundaries, transparency, accountability, monitoring and reporting, independent audit and graduated sanctions
- It needs to be inclusive, adaptable and focus on improvement
- It has great potential

5. An Environmental Perspective – Forest & Bird's Neil Deans

- Environmental protection is part of users "licence to operate"
- Self-management is attractive but there has been failure or under performance
- Self-management allows for flexibility but in method rather than outcomes
- Audit is the essential component for environmental interests
- Adaptive management has a place in ASM
- Unless environmental interests have confidence in ASM then they will adopt a precautionary approach

Section 3: Operating Criteria

ASM is a tool, as a result of which it has a number of specific characteristics which have been defined as operating criteria. The following list was developed from the workshop.

• Accreditation

Accreditation of ASM schemes was seen as a key factor in their credibility. There was support for accreditation schemes that might stretch across clusters of

schemes or even all schemes. Consideration was given as to whether this could be a role for regional councils.

Auditing

Auditing is a key operational requirement. Stakeholders require transparency through audit for them to have confidence. Auditing does not necessarily have to be independent, but if not independent transparency is ever more important. The parameters of the audit need to be well defined.

The audit process does not have to be carried out by an independent auditor to be approved (though it may be) but at some stage in the process there must be expert independent scrutiny. There are various forms this could take, including audit of the auditor, the calibration of instruments or systems, and so forth.

Targets

On the assumption that ASM schemes are outcome-focused then schemes need to have a clear set of targets, which are the practical expression of the outcomes reduced down to an operational level. Milestones are the markers used to define progress against those targets.

Measurement & Monitoring

Given that ASM is built around milestones then measurement and monitoring are essential to its effectiveness. Discussion groups were quick to point out the importance of the quality of the information used for monitoring and audit and that there needed to be an emphasis on technology through the web and good telemetry.

The question of access to data was also raised. This is also covered under such matters as transparency. It was assumed that information would be multi-layered and that a policy is required for access to the different layers of information.

The point was also made that information needed to be usable for the farmer. Raw data is not necessarily desirable as the farmer may not have the time or resources to process it. Value added services in this area were noted as important.

The difference between quantitative and qualitative data arose in a number of discussions. This is covered later in the report in the issues section. Measurement of qualitative data is at the heart of the matter.

Feedback loops

Such loops are required for audit to contribute to the continual improvement objective of ASM. ASM needs have well developed communication channels. Closely associated with continuous improvement is also continuous learning from the experience of operation both for farmers and scheme operators and consultants (such as auditors).

Another take on feedback loops is reporting and communication. This was seen as a vital element in ASM, especially where there is a community stakeholder dimension.

• Sanctions and Incentives

A system of sanctions is required to enforce ASM. It was agreed that sanctions required careful planning to avoid over reaction or exhausting remedies too quickly. Graduated programmes of sanctions were favoured.

Conversely, incentives to compliance were seen as valuable and an excellent "preventive" strategy to avoid the negative effects of having to implement sanctions.

Behind these schemes there may be another hierarchy of sanctions, especially where they are backed by regulation such as consent-based regulation. Such sanctions may involve prosecution against consents or loss of the self-management privilege.

Consideration was given to the "toughness" of sanctions. "Turn off the water" was a method promoted by a few, but a programme of graduated sanctions to align behaviour with "turn off the water" as the last resort, was seen as desirable.

The blend of incentives and sanctions was described by one discussion group as "a large orange-coloured, carrot-shaped stick".

The point was made that without an enforcement system there is no credibility.

• Conflict Resolution

There is a need for low cost conflict resolution mechanisms to deal with disputes within schemes and between schemes and regulators. Where conflict gets beyond reasonable levels it is often difficult to resolve by internal processes. Third party resolution also has the impact of establishing industry-wide principles.

Section 4: The Case for and against ASM

The case for and against ASM was discussed in depth. The reason for this was to establish the value proposition and several speakers warned of the danger of taking on ASM because it was "flavour of the month" without fully analysing that it is the best strategy to be pursuing. It was noted that there are alternatives.

Aspects of the cases for and against have already been picked up in the report. However, they are repeated here in the context of thought about the value proposition.

The case for:

- Ownership the sense of ownership and buy-in that is associated with it
- Community engagement the opportunity to build on the licence to farm

- **Reputation** the opportunity to build a positive reputation with all stakeholders and to build relationships
- **Achievement and pride** achievement of standards and outcomes can be the source of considerable pride and confidence
- Whole business perspective it forces land users to take a whole business approach to their operation, thereby maturing their management style
- **Integration** this is closely related to the whole business perspective. ASM requires land users to have an integrated and holistic view of their business
- **Future-focus** it is difficult to practice ASM without having a future view. This more strategic approach is required for future success both for individuals and for industries
- **Best practice** ASM drives practice improvement and best practice. In that sense it drives standardisation. It also supports efficiency and streamlining.
- **Self-management** ASM empowers self-management
- New thinking and innovation this is associated with best practice

The case against:

- **Cost** the cost is not insignificant and may be more than imagined. It could also lead to cost-shifting
- **Duplication** ASM may already be being done by other systems. There are already multiple standardisation processes going on around the farming sector. Does ASM add anything more?
- **Uncertainty** at least at this stage it has an air of being experimental and unproven
- **Difficult** seen as having a high level of difficulty by farmers and other stakeholders
- **Community trust breakdown** environmental expectations may not be achieved
- **Fit for purpose** does not work in all situations
- Questionable independence can industry be other than self-interested
- Closed shop there could be a too narrow definition of stakeholders
- Time consuming a significant extra impost on the time of the farmer

• **Lag time** – results, particularly qualitative results may be slow to come. This may include the financial advantages (if there are any)

Section 5: Current Industry Initiatives

1. A DairyNZ Perspective – Fonterra's John Hutchings

- What is ASM? It is a combination of outcomes (industry and community) and audit (to give credibility and verification)
- The Clean Streams Accord provides a background
- Major resource effort advisors, 10,500 farms, one on one consultation
- More milk without more emission is possible
- ASM programme currently in development
- There are expectations and benefits for all parties farmers, industry, regional councils and NGOs
- Schemes can be regulator or industry driven. Collaboration is important
- Key issues: dealing with non-compliance, balancing economic and environmental values, avoiding cost or expectation creep, performance management and transparency, role of adaptive management
- Does not exist in isolation Accord, effluent design, professional accreditation, sustainable milk production plans
- Farmer acceptance requires constant engagement

2. Synlait Certification Scheme – Lucy Bowker

- Introducing a certification scheme has been challenging
- The initiative was justified by the prospect of being able to gain better value for the spend in the quality area
- Originally envisaged as an environmental initiative but has extended to social, animal welfare quality, traceability and other aspects
- Considerable facilitation was required but there were considerable spin-offs from working together

3. Morven Glenavy Ikawai Irrigation - Robyn Murphy

- When MGI sought to increase its command area it became apparent that shareholders needed to embrace farm plans and best management practice
- It was decided that all farms would have farm plans by 2014 but this will be achieved by 2012
- All pumps will have flow meters and telemetry
- The ASM initiative was aligned with new consent conditions for the extension of the command area
- An environmental strategy was developed
- A major one-on-one approach was taken with:
 - o A field day on irrigation efficiency
 - o Farmer meetings and briefings
 - o Auditing was introduced early

- An external consultant provided an efficiency study with an emphasis on soil moisture monitoring
- Weather stations were installed
- The outcome has been a committed and involved group of shareholders

4. Fertiliser Industry Initiatives – Dr Philip Mladenov

- The industry has committed to nutrient management planning and auditing of those plans
- It has developed planning resources including traing and advisory facilities
- 5,000 plans have been delivered for dairy farms with 43% of all farms on plans
- These plans are externally audited
- Farmer commitment to plans is above average and improving
- Plans include nutrient budgets
- Benchmarks are used to motivate farmers
- Collaborative project with DairyNZ

5. ASM in the Sheep and Beef Industry - Richard Wakelin

- This is an industry focused scheme referencing key industry markets
- The core of it is a Land and Environment Plan made for each farm
- The LEP is well resourced with work books and resources
- A major feature of the LEP is a farm map
- Programme also includes nutrient budgeting, yield gap, land and environment work programme, monitoring programme
- Support by region-based extension managers
- Aligned with research investment and monitor farms

6. Sustainable Winegrowing New Zealand - Philip Manson

- Key elements are: measurement, continuous improvement, independent audit and international recognition and acceptance
- Programme has three requirements monitor, measure, manage
- Benchmarking is important and detailed data is collected
- Irrigation water use is recorded
- Irrigation system performance is monitored
- Onsite waste water disposal systems are part of the programme
- Habitat enhancement is encouraged
- Challenges water quality, energy conservation and GHG accounting, air quality, biodiversity, environmental integrity, waste minimisation, residues, training of labour

7. Horticulture New Zealand - Matt Doolan

- 7,000 growers, 22 product groups
- ASM is based around New Zealand GAP
- Rapidly growing industry
- Highly customer and market focused
- Retailers drive the agenda in Europe especially

- Objectives easy tools for growers, technology transfer, ease of compliance, meet market expectations
- Challenges managing nutrients, conserving soils, responsible use of chemicals and efficient water use
- Close and growing relationship with regional councils

8. North Otago Irrigation Company – Jodi Leckie

- 10,000ha, 100 shareholders
- ASM components Water supply agreement, environmental policy, farm plans (and procedures), annual farm audit (independent), environmental coordinator
- Strict compliance plan with water disconnection as ultimate sanction
- Farm plan system working well
- Close work with individual farmers to resolve environmental issues
- Strong working relationship with regional council
- Large amount of time and effort required
- Good farmers should not subside bad farmers

9. Arable Irrigation Research and Extension - Rob Craigie

- Testing impact of irrigation
- Comparing water use efficiency of cultivars
- Testing of remote soil sensing
- Ongoing research on individual species

10. ASM and Certification in Plantation Forestry - Peter Weir

- The forestry industry has a range of international standards that it can comply with
- These have robust certification and are support by ENGOs, particularly FSC
- Industry is actively involved in the international arena
- Standards of environmental management in forestry are high
- ASM should detect problems before they occur
- Naming and shaming is powerful

Section 6: Issues and unresolved considerations

Beyond the conclusions contained in the principles and operating criteria listed above, there were many areas where participants at the workshop concluded further thinking was required. This section describes a whole range of issues that arose. This list can be used as a checklist so that these matters can be systematically considered.

Non-compliance

What is the role of industry and irrigation schemes/user groups in non-compliance? If regulatory enforcement by industry and irrigation schemes/user groups is not an accepted option in some scenarios, then what are the trigger points for 'turning-over' non-compliance to the regulator?

Auditing

How is the 'approved' auditor concept best managed particularly given the subjective and uncertain nature of some aspects of the audit? What are the pros and cons of accreditation programmes for industry personnel versus certified independent auditors? Where is the line between need for relevant knowledge and experience and the need for independence, particularly given current capacity and capability?

• Industry

How do market based industry ASM programmes line-up with regulatory (RMA) requirements? How do we encourage a cross sector co-ordinated approach to future ASM programme development, with particular regard to the need for the interoperability of programmes? Can we achieve a modular approach?

Regulators

How do we ensure a consistent regulatory approach to ASM programmes by Regional Council's and Unitary Authorities?

End Users

How do we promote the awareness of, the need for and the requirements of ASM programmes with the end users (farmers and growers)? There is a need to better identify barriers to and drivers for ASM particularly through learning's from case studies across a spectrum of land uses.

Boundary issues

ASM was continually described as a tool that could apply to a number of different situations, but is it applicable in every situation? Where does its domain begin and end and that of other approaches operate? There may be other management systems operating in an industry or even at the farm level – which does what and where are the boundaries?

Another important point is deciding where the line is between self-management and external management?

Scope creep is another consideration (see Section 1). This is where the scope of a particular scheme grows and overlaps with others. This is particularly where boundary issues will arise. It is also where alignment between various schemes and purposes becomes important. One commentator advocated care in the extension of ASM schemes with an emphasis on limitation of scope to avoid duplication. He also took the view that the wider the reach the less effective a scheme would become. This view was not necessarily widely shared.

Consistency between land uses

Individual farms may have a mixture of land uses and there may be differing ASM regimes applying to each land use. Is there an argument for ASM regimes having similar fundamentals so that they can be integrated at the farm level?

Key drivers

What exactly are the drivers for ASM with individual land users? Is it the sense of "managing your own ship"? Is it the cost? Is it the added benefits such as self-improvement? Is it peer pressure? Understanding this is vital.

One commentator made the point that the drivers need to be business outcomes supported by non-business ideals, but not vice versa. Without business drivers, he said, ASM would not be sustainable.

• Value proposition

What is the actual value of ASM? Is there a strong financial driver? Many in the workshop believed that financial drivers (related to the actual operation of ASM) were not strong because costs (of using it or not using it) were either the same or greater. The value proposition was seen more particularly in practice improvement and enhancement because of farmer/user motivation and stakeholder buy-in. It was acknowledged that this should lead to great value and productivity of the business (which is a business driver)

The point was made repeatedly that ASM is not the answer to everything.

What does success look like?

The common theme through the workshop was that ASM is about outcomes. However, noting that ASM is not about setting outcomes, success therefore looks like the achievement of outcomes. It was repeatedly said that outcomes could only be achieved if they were defined.

One commentator issued a word of warning. He said that "we need to be careful not to recreate a regulatory scheme that parallels the RMA process". ASM is not a process to avoid RMA regulatory controls, but a method of achieving them.

How far behind the farm gate?

How far into the operation of the farm should ASM reach? It was generally agreed that this depended on the nature of the programme, but the answer is as far as it has to, to affect the outcome.

• How much should it involve the community?

Is ASM simply the concern of the land user? If the outcomes have a community dimension such as environmental outcomes, then there is a legitimate place for community involvement. If an ASM scheme is designed for consumers or buyers then arguably they should have an involvement. There was a strong sense of appropriate design to purpose.

One commentator made the point that community involvement, particularly in an RMA context, has the potential to take ASM beyond "mere compliance" monitoring to become more of a social contract between industries and the community at large. This is the social licence consideration in the context of ASM.

• Achieving the confidence of the regulator

There is a level of trust involved in ASM which requires confidence on the part of the regulator, whether the regulator is industry or regional council. Where there is a low level of trust, reliance on audit would be high. Where trust is greater, then spot audits and percentage checks may be more reasonable.

It was acknowledged that ASM is designed to avoid onerous regulation that might be imposed by an "unreasonable" regulator. ASM is more palatable to the user.

• How far do industry groups want to regulate?

Industry schemes are quite varied. Some are highly sophisticated and controlled other are indicative and directional. Where outcomes relate to industry benefits then the industry sets the 'regulation'. Where regulation relates to public bodies such as regional councils then they set the standard.

Industry specific jargon compared to general principles

This point relates to the question of universality of ASM. Should the fundamentals of programmes all be the same? Should they be transferable? Programmes linked to a particular industry inevitably contain industry language and culture.

• What is the role of benchmarking?

Benchmarking between farmers, between schemes, between industries was seen as important, particularly in the development of practice. These are more advanced elements of practice as ASM develops.

• Can ASM work for an individual in isolation?

Opinions differed on this point but it was generally felt that ASM was a group activity.

• Should we pull existing data from individual entities into one dedicated database?

This question is tied up with the issue of whether ASM is a generic tool applied across many different industries or applications. If it is seen as generic, then it would have generic characteristics. In that situation there would be a strong case for development of the generic operation through the use of shared data, benchmarking, etc

Behind this issue is that of the quality of information available. It was generally acknowledged that the quality of information is, at least, variable, and in some cases very unreliable. If there is to be benchmarking and collection of common data, then common datasets and collection methods and standards will be required.

• Farmer engagement in developing systems

It was noted that much of ASM development has been "bottom-up" initiated by farmer/user collectives. This seems to be a reflection of the maturity of the practice. With benchmarking across industries it is likely that adoption will

become more "top down" as industries or entities seek to adopt ASM as a matter of alignment with other industries or competing industries. Would this cause difficulties in programme operation?

On commentator made the point that implementation of ASM is not straightforward, in fact, there is quite a lot of complexity and farmer engagement is only one part of that. She said that without industry incentives or consent requirements it is a hard sell on a voluntary basis. She said there are a number of clear decision points along the way and these should be taken seriously so that farmers/users are quite clear about what they are getting into.

• To what extent is ASM a competitive matter?

In its present form ASM does not appear to be seen as a competitive tool, in fact, to the contrary. There was strong support for the use and sharing of information – IP – about the use and application of ASM. Whether this situation will remain as the practice matures is difficult to know and no conclusions were reached.

• Resourcing and costs

There was some doubt around the real cost of ASM. Some felt that there could be considerable cost that is masked by the integration of ASM with other onfarm processes. Others believed many of those processes would have to be undertaken anyway. Nevertheless, it was agreed that affordability is a significant consideration.

• Defining the nature of audit

Despite some of the conclusions arrived at, policy around the nature and requirement of audit still appeared to be an area of uncertainty. Not all participants in the workshop agreed that audit needed to be third party although they would probably concede that independent auditing of the auditors was necessary. It was generally agreed that self-audit within a collective was legitimate. The importance of the audit process was not disputed. They all agreed that credible audit was fundamental.

Discussion arose at one point on the universality of audit approaches and styles and there was support for benchmarking in this area.

The credibility of auditors was seen as important and reflected on the credibility of a given programme. It was felt that ASM had vulnerability in this respect, particularly those who support benchmarking of audit practice. They raised the question of who audits the auditors.

Who audits the auditors?

There was no doubt that some form of auditing of auditors was required but the question arose as to who and who pays? For example, if the regional council takes on this function, is it user pays?

• Capability and skill development

Managing an ASM programme either at a farm or scheme level is a skilled undertaking and the practice of ASM is becoming more sophisticated. There is a need for training and capability building which many felt did not currently exist.

The point was made that capability was needed at different levels. There is operational capability but there also needs to be a developmental capability to take ASM forward in a more generic sense.

Another take on this issue was the question of "who is going to do the work"? Who is going to put in the developmental effort that is required to advance ASM? It was felt by one particular commentator that this has not been sufficiently considered and that the move to ASM might stall as a result of lack of developmental input.

An example of where developmental work is required is in the area of nutrient management. This is an industry and regional council concern and both need to work together on these matters.

• Commercial sensitivity

Where involvement of the community is part of the design of an ASM scheme then there are potential questions of IP, confidentiality and commercial sensitivity. At some levels this can be controlled by the practice of audit but whatever the method, a significant level of transparency is required. While ASM driven programmes are not competitive this is less of a problem, but as they become more extensive the possibility of competition will emerge and with it commercial sensitivity.

Policy framework

To what extent does there need to be a policy framework for ASM either at the regional or central government level. For this to happen, ASM would have to evolve beyond being a tool to an established practice. This is an issue of the future.

An extension of this is whether an activity would be permitted because it has an ASM scheme attached to it. This whole connection between status under the RMA and ASM was one that was opened in discussion but not resolved.

• Not one size fits all

Although it has been alluded to frequently in this report, it needs to be restated that affirm point made by participants was that one size does not fit all. That said, if the development of ASM is to become more generic, then accepted standards of practice and design may be more of a feature of the future.

One commentator made the point "it is not the whole answer to managing resources, but it is a useful tool." There were varying points of view on this matter, mainly of degree.

Conflicts of interest

It was noted that there are potential conflicts of interest right throughout ASM which makes audit and information requirements sensitive. It also makes transparency important because conflicts of interest often evaporate with transparency.

• Leadership

The issue of leadership came up repeatedly. This referred to leadership at a national, regional and local level. One commentator made the point that leadership is crucial because of the risks and difficulties. His advice was "keep it simple", "work hard at the front end to get it right", "draw of existing structures" and "don't reinvent the wheel".

Section 7: Future Actions and Recommendations

In many respects the workshop confirmed that the use of the ASM concept in the primary sector in New Zealand is still in its infancy. Some sectors, such as the horticulture and viticulture sectors are more advanced in their thinking and practice driven mostly by export market requirements, though these programmes are more industry than consent related.

Workshop discussions confirmed the growing appetite for use of the ASM approach as a tool in the RMA context. The workshop confirmed that the current enthusiasm for ASM is justified although there are still a number of outstanding issues and questions about how use of the concept may actually pan out in practice.

The following recommended actions have been brought together as a summary of what was said and as a starting point for discussions on how to resolve some of the outstanding issues.

- Develop a good understanding (legal opinion) about how ASM fits and can fit into current legislative frameworks
- Publish, using the proceedings of this workshop, a definitive list of operating principles and practices
- Investigate the feasibility of establishing a national accreditation programme for ASM auditors.
- Develop a library of 1-2 page easy to read case studies which are appropriately accessible
- Identify current overlaps between existing ASM programmes and work to standardise, avoid duplication and explore opportunities for cooperative action.
- Explore ways of making information about ASM more accessible such as through web and other channels. Each industry could take responsibility for information about its programme.
- Explore ways of building capability across the whole range of ASM practice.
- That the workshop report be widely distributed within the primary sector and to interested parties including the Land and Water Forum, Ministry of Agriculture and Ministry for Environment and regional councils.

 That Irrigation NZ and the Primary Sector Water Partnership develop a programme in conjunction with the regional councils for the advancement of the ASM concept in NZ.

There were a number of quite specific recommendations that arose from directly from the workshop. While not necessarily being unanimously supported they are recorded here for reference:

1. To regional councils:

- That regional councils refrain from using ASM as a regulatory tool
- That regional councils provide incentives for ASM involvement
- That regional councils look to make incentives nationally consistent (initiated from industry)

2. To Irrigation New Zealand and the Primary Sector Water Partnership

- Not only train farmers but also regulators to avoid micro-management
- Develop a process for accrediting the auditors to ensure credibility of ASM
- Develop methodologies for sharing learning and evaluation for ASM programme improvement. Opportunities for cooperative action should also be explored.
- Undertake a census of programmes to understand current practice
- Specifically explore the duplication problem to identify strategies and solutions