BOWEN WATER USERS
FOCUS GROUP WORKSHOP1
14TH MAY 2012

AS PART OF PROJECT ENTITLED

DELIVERY OF FOCUS GROUPS AND INTERVIEWS FOR THE NATIONAL WATER COMPLIANCE FRAMEWORK

FINAL REPORT

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SUMMARY

This document reports the outcomes of the first of four focus group workshops conducted as part of the project entitled "Delivery of focus groups and interviews for the National Water Compliance Framework". The workshops were part of a project commissioned in April 2012 by the (then) Department of Environment and Resource Management in fulfilment of Queensland's obligations under the National Water Compliance Framework.

The workshop was conducted on 14th May 2012 at the Bowen TAFE. Seven water users attended the workshop.

A systems diagram was created by focus group participants which illustrated the complexity of factors that determine both water supply and demand. These factors included crop types, weather, technology, water sources, specific water licence requirements and historical decisions about the volume of water to attribute to licences.

The participants believed that there was a reasonable grasp of the rules and respect for the rules amongst the farming community although this was driven more by concerns about a penalty than due to good communications with and respect for the Department. And the compliance with the rules was seen as relatively high despite the group perceiving a discrepancy between the rules for the Bowen Groundwater Management Area and the amount of water in the aquifer. Compliance was promoted by a perception of high degrees of inspection, detection and of high proportions of detections leading to prosecutions. The penalties applied were also seen as adequate to deter illegal water use.

In terms of communication preferences, electronic media (websites, email) were of least use in terms of effective communication mechanisms and face-to-face interactions were preferred. It was strongly suggested that any written communications be delivered in clearer and simpler English.

INTRODUCTION

This is a report of the first of four workshops conducted as part of the project entitled "Delivery of focus groups and interviews for the National Water Compliance Framework".

The workshops were part of a project commissioned in April 2012 by the (then) Department of Environment and Resource Management. It is now being managed by the Department of Science, Information Technology, Innovation and the Arts (DoSITIA) on behalf of the Department of Natural Resources and Mines (DNRM).

The workshop series included four regional workshops, of which two were conducted in Bowen on 14 and 15 May 2012 with water users in the Bowen Groundwater Management Area (Bowen GMA or BGMA), and two were conducted in Bundaberg on 16 and 17 May 2012 with water users from the Coastal Burnett Groundwater Management Area.

BACKGROUND INFORMATION

INVITATIONS

The Department provided the consultants with water licence holder databases for the Bowen and Coastal Burnett Groundwater Management Areas. From those databases, approximately 60 names were randomly selected for both areas. Letters of invitation were sent to these water licence holders two weeks prior to the workshops. Follow-up telephone calls were then made. In addition, to secure sufficient participation at the focus groups, more water licence holders were randomly selected from the database and contacted by telephone and/or email.

FOCUS GROUP DISCUSSION

The proposed format for the meetings was focus group discussion. This format is often applied to assist with program development or evaluation as it engenders debate and consensus building.

DRAFT AGENDA

Approximately two hours were allocated for each focus group discussion. The agenda is shown in Table 1.

Table 1: Generic draft agenda

Agenda item and details	Time
1. Welcome & introductions * Introduction by consultants * The Project: Outline, purpose; objectives * Formalities: Plain-English Project Summary; Informed Consent Form; Payment at close of meeting * Participants' introduction * Meeting logistics	0:00—0:15
2. Water use on farms: water demand v's water supply	0.15—0:45
3. Compliance: Using the T11 approach	0:45—1:45
 4. Water user preferences * communications from DERM * information relating to water resource planning, water user responsibilities and compliance 	1:45—1:55
5. Meeting close * Thank participants * Input into draft report * Forthcoming survey of water users * Evaluation * Participant payment	1:55—2:00

Refreshments were available throughout each workshop.

Where possible, focus group discussions were recorded on butcher paper and whiteboard, as this provided a visual representation of the verbal exchange and fostered a shared understanding of the topics discussed, including points of consensus and disagreement. One member of the research team also took notes during the meeting. Furthermore, the discussions were audio recorded to ensure that all the participants' comments were captured and added to the workshop data for analysis and report writing.

A report was provided to participants no later than five working days after the workshop, for review and feedback.

SYSTEMS APPROACH TO WATER USE

Taking a systems approach to land management involves exploring the complexity of interactions within and between the 'hard' system (the biophysical components) and the 'soft' system (the farm family and community, innovative technologies). It also acknowledges that these systems are embedded in larger systems that provide context and meaning for decisions made at the farm level (e.g. broader economic, cultural and social systems). A systems approach has been shown to be useful because it takes on a holistic view of the world and allows for interactions to be uncovered. (Bosch et al 2007)

A systems approach was used to frame focus group discussions about how water users make decisions about water consumption. Of course, the term "systems approach" was not used during the focus group but the approach meant that the discussions identified the various factors and relationships which influence water use decision-making. These factors comprised internal and external factors (see first part of Results section, below). Internal factors could have included personal motivations, risk preferences, and farm economics, while external factors relate to markets, the environment and government regulation.

A systems approach is highly applicable for use in a focus group or workshop situation as it: (1) brings an analytical approach to the subject matter; and (2) lends itself to visually engaged facilitation (the factors mentioned by focus group participants were "mapped" out and linked to each other on a whiteboard or on butcher paper). Visually engaged facilitation is often employed in a 'learning' environment. In contrast to a linear treatment of the subject matter, a visual systems approach enables the exploration of the direct and indirect consequences of variables, ensures that a vast realm of complexity is dealt with, and allows the explanation of perverse outcomes. A systems diagram maps and links the captured information from a focus group. It is an effective and efficient way of visually representing participant input and the final product, a shared mental model, reflects both the collective and disparate views of the discussion topic as held by the participants.

A FRAMEWORK TO EXPLORE COMPLIANCE WITH WATER REGULATION

The 'Table of Eleven' (T11) methodology was developed for the specific purpose of exploring compliance issues (LEEC 2004, Herzfeld & Jongeneel 2012). It

therefore lends itself as a tool to structure and support the exploration of compliance decision making by water users regulated under the *Water Act 2000*. The T11 methodology consists of eleven dimensions or factors that are important to compliance. Together, these dimensions can be used to gain a better understanding of the level, and likelihood, of compliance with any piece of legislation.

The eleven dimensions were formulated to be as practical as possible in the fields of policy-making and law enforcement. They relate to spontaneous (voluntary) compliance (1-6) and enforcement (7-11) dimensions.

We adopted the T11 approach but tailored aspects of the terminology to be more meaningful to the local situation.

The tailored dimensions are:

- 1. Knowledge of rules—including familiarity with rules and clarity of rules
- 2. Cost/benefits of compliance and non-compliance—both financial/economic and intangible
- 3. Extent of acceptance of the policy/legislation—both acceptance of its objective and its effects
- 4. Respect for authority—in terms of official authority and competing authority
- 5. Social control and water user self-regulation
- 6. Likelihood of being reported by somebody other than the authorities
- 7. Likelihood of inspection (of records or installations) by the authorities—both actual and perceived
- 8. Perceived likelihood of detection on the basis of an inspection
- 9. Selectivity (or targeting), ie. the perceived increased likelihood of selective inspection following a violation
- 10. Perceived likelihood of a penalty (fine or other) being issued following detection)
- 11. Severity of the penalty—in terms of amount of financial damage or damage to reputation

The questions used to guide discussions are attached to this report.

WATER USER COMMUNICATION PREFERENCES

The third and final part of the workshop elicited water licence holders' preferences in relation to communicating with, and receiving communication from, the Department. During this section of the workshop the participants provided feedback relating to both the content of information required and the process or procedure by which such information could be communicated with them and the broader community.

WORKSHOP DETAILS

Date: 14 May 2012

Time: 16:00—18:00

Location: TAFE, Bowen

Participants: Seven water users

All participants lived on acreage outside Bowen.

Land area managed ranged from approximately 20 to 120 acres in

various combinations of properties; some acreage leased; some not; in most cases land partially

irrigated

Water licences ranged from approximately 8 Ml to 140 Ml. It is

important to note that size of licence was not necessarily correlated with acreage nor was all allocated groundwater necessarily usable due to

poor water quality.

Enterprises for which water was used (from licences or other

sources) including cattle and horses, tomatoes, beans, cucumber, capsicum, peas, corn, sugar

cane, hibiscus, renting houses,

additional horticultural enterprises were planned

by some participants in the future

Length of land ownership ranged from as recent as 18 months to

multiple generations.

Research Team: Romy Greiner (facilitator)

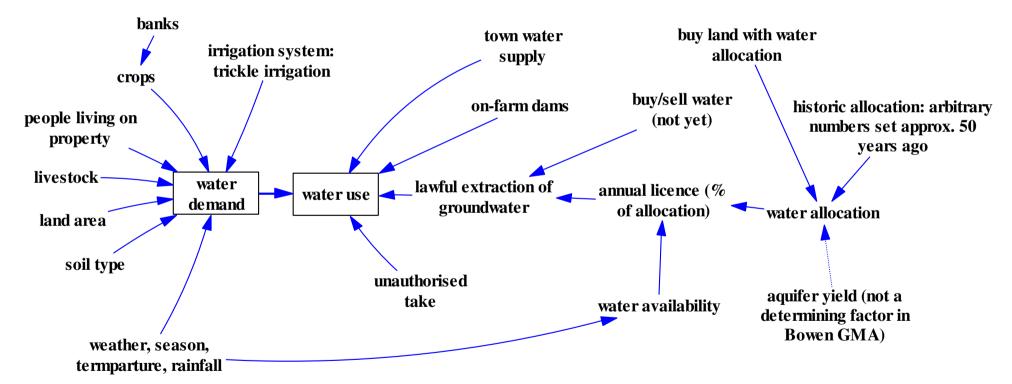
Leanne Fernandes (co-facilitator)

RESULTS

SYSTEMS DIAGRAM

Workshop participants were asked to identify factors that they considered pertained to both water demand and water use. This information led to the construction of the following systems diagram (Figure 1). The arrows indicate the direction of influence of one factor upon another.

Figure 1: Systems diagram of factors determining water demand and water use



In the systems diagram, above, a couple of items require clarification. Technically, there are water licences or water entitlements in the Bowen Groundwater Management Area; there are no water "allocations". However, focus group participants referred to water "allocations" and the participants terminology is reflected in the diagram.

The diagram refers to "Buy/sell water (not yet)" meaning that the purchasing and selling of water licences or entitlements does not occur in the Bowen Groundwater Management Area according to the focus group participants.

"Aquifer yield (not a determining factor in the Bowen GMA)" refers to the fact that participants considered that the volume of water available in the aquifer did not impact upon the volume of water permitted to be taken under licence.

COMPLIANCE DIMENSIONS

Here we explore the findings of the workshop as they pertain to each dimension of compliance. In most instances, responses were provided to questions used as prompts (see Attachment), however, discussions sometimes covered the topics to be addressed before the questions were asked. The overarching view (or views) of the group is presented and an example of the types of comments made which substantiate this view is provided within each compliance topic discussed. These latter are direct quotes from the focus group discussions.

Knowledge of the rules

Definition: the familiarity with and clarity of legislation among the target group.

A good knowledge of the water sharing rules was demonstrated, by the focus group participants, through the depth of information they shared about topics such as: the rules pertaining to the installation of new bores; the distinction between irrigation versus stock and domestic bores; knowledge of their water allocation; knowledge of when their meters were read; the rules relating to the amalgamation of water licences); and penalties that exist for non-compliance with the rules.

There was a general view amongst the participants that the water sharing rules were not necessarily communicated in a way that was clear to people and that some misunderstandings remained. For example, one participant cited an instance where a water licence holder with multiple bores, each with its own licence, thought that their licences were amalgamated, but they were not: "where they think they've got an amalgamated licence when they are not amalgamated."

Water Act 2000: Only one person had read part of the Water Act 2000. It was seen, by the group, as very long and complicated and open to interpretation.

"Two people can look at it [the Water Act 2000] in a different way."

"The only way to understand your rights is to pay a solicitor."

Communications from Department: Should be in plain English and simple.

"When you get your licence, there's about three times as much on how to appeal and what to do if you don't like it and no-one reads it. It's too complicated and way over people's heads."

Telephone communications with the Department were not consistent.

"If you ring the Department for interpretation or advice, you must get them to put it in writing because the next person you deal with might have a different view and will fine you."

Costs/benefits

Definition: the tangible/intangible advantages and disadvantages arising from compliance or non-compliance with the rule(s), expressed in time, money and effort.

Financial costs of compliance, as identified by the focus group, included:

Payment of new meters at \$450/meter until the full cost (\$6000/meter) has been paid off;

Payment for any new pipe work required due to the installation of new meters:

\$500 to remove an unwanted meter;

Cost associated with installing water saving technology e.g. trickle irrigation, plastic mulch

Cost of alternative water sources e.g. town water. "I've had to pay X million dollars on town water."

Financial benefits of compliance include avoiding penalties.

Intangible costs include the application of risk management. The farmers in the focus group said that they, and farmers in general, plant on the expectations of an average year and exceptionally dry or hot spells would increase crop water demand.

"In a dry year, it might take up to 12-14 hours to water up your bed for the first time; in a wet year it'll take up to 4 hours."

Intangible costs also occur if community members behave differently (more negatively) towards those they think are breaking the rules. From the focus group discussions, it seemed that breaking the rules was not supported by the community.

"People are generally not happy when water allocations are not complied with."

It is possible that some subtle change in behaviour towards those seen as non-compliant could result from this "unhappiness" about non-compliance although this was not specifically mentioned. See also the Section on "Probability of reporting non-compliance".

Degree of acceptance

Definition: the degree or extent to which the policy and legislation is considered acceptable by the target group.

Acceptance levels were low. The rules were seen not to be linked to the aquifer capacity and also not whether there was water in the river or not. The controls were seen as a money-making exercise on the part of the government (e.g. via the costs of new meters, costs of removal of old meters, penalites).

"There's an issue with the rules; it's all about whether they can make money from it."

Target group's respect for authority

Definition: the extent to which the target group respects the government's authority.

There was little respect for the authority of the Department administering the water regulations.

"None." "Very, very little." "They've got to earn that respect and they haven't done that."

Water users felt they've had very little input into the rules and only respected the rules because of the fines.

"Also we've had no input into the rules." "Are you talking about respect for the authority or respect for the fine?"

The Department had offered conflicting advice at different times.

"Many, many years ago we were given to understand that the more pumps we had the more we could spread the extraction out and it wouldn't cause salt intrusion. But when we went to a meeting about all these new meters, their answer was that if you don't want to pay for the new meters then just put them on one (bore) and draw all your water from that. And that's exactly what they told us NOT to do before."

There was a feasibility study "Water for Bowen" that water users had paid to be part of (up to \$70 000 according to some focus group participants) and this study was never completed, nor was any report made available. This led to some disgruntlement.

"...last year they said they've run out of money and you'll never see water from this project."

Non-government control

Definition: the probability, as estimated by the target group, of positive or negative sanctions on their behaviour other than by the authorities

There were conflicting views as to whether one could notice a water violation in the community. One view was that violations would be extremely obvious:

"It sticks out like a dog's breakfast if you're taking water illegally."

Another view was that it wasn't obvious:

"Don't know much about people busting their allocation..."

Probability of reporting non-compliance

Definition: the probability, as estimated by the target group, of a violation detected by anyone other than the authorities, being reported to a government body.

People generally knew who to report a water sharing violation to. However, there seemed a disinclination to report suspected violations due to uncertainty about illegal activities or fear of repercussions of reporting neighbours.

"How can you report illegal take of water because not all the allocations are equal. You have to know what their allocation is and you wouldn't have a clue."

"If you are going to dob on your neighbour, that's going to create problems down the track."

Probability of inspection

Definition: the probability, as estimated by the target group, of an inspection by the authorities as to whether rules are broken.

The probability of inspection of water meters was considered 100%.

"The inspectors come every 3 months and it's not known when they come. They come to all the irrigators. They check your water usage and your meters and walk the properties. They look at past records as well now with the new meters."

Probability of detection

Definition: the probability, as estimated by the target group, of a violation being detected in an inspection carried out by the authorities.

The chance of detection was also seen as very high.

"If something's not right, it's tagged so the inspectors can pick it up."

"The data can't be tampered with. They inspect the lead seal around it as well."

"...it's obvious when you're growing a crop and you haven't got any water."

Targeting

Definition: The perceived (increased) risk of inspection and detection of a violation resulting from the targeting of businesses, persons, actions or areas to be inspected.

Bowen was seen as an area targeted by the Department according to the focus group participants.

"Are they picking on people who are isolated [ie from the location of the DERM office] because they don't have a relationship with the Department?"

Probability and severity of penalty

Definition: the probability, as estimated by the target group, of a penalty being imposed if an inspection reveals that a rule has been broken and the severity and nature of the penalty associated with the violation and additional disadvantages of being penalised.

The experience of the workshop participants was that if illegal take had been detected it was subsequently prosecuted.

The fines were understood to be in the *Water Act 2000* and there was a "three strikes and you're out" policy. The **penalties were now seen as adequate** deterrent.

"The fines are that high, they're not chicken feed."

"If you get detected, you can lose your licence."

In the past, the group considered that this was not the case, where fines were seen as part of the cost of doing business.

There was view that there should be some flexibility in the system to accommodate for situations where a 'little extra' water was needed to save the crop during 'those last few weeks'.

"You could have a crop that's four days from harvest, and if your allocation runs out, what do you do? Do you let that crop die or do you go over the allocation so the crop survives?"

"It would be good if there were provisions to be flexible..."

"...if you ask for an extra 5ML this year and take if off next year's allocation."

WATER USER COMMUNICATION PREFERENCES

There was a level of dissatisfaction and confusion amongst all of the focus group members about the move of the regional DERM office from Ayr to Mackay.

"Why should we run down to Mackay if we want to see someone face-to-face?"

"Our crops are more aligned, too, with the Burdekin area than Mackay... the people in Mackaywouldn't have a clue about us."

"You don't have a rapport with the Departmental officers."

The level of paperwork (with regard to renewing licences) was seen as onerous.

"A lot of people can't handle the paperwork."

Reliable, regular reminders of when the water licence was up for renewal would be appreciated.

"... I really think there is a big need for all licence holders to get a reminder."

"When you don't renew it, your licence is automatically cancelled and you've got no recourse."

A local office or, at least, regular availability of DERM (now DNRM) staff in Bowen would be appreciated.

"Really should allocate one day a week or have someone in Bowen."

"You'd cover all that "respect for authority" and "knowledge of the rules" and all that....."

"If they were here once a week during the growing season, that's only 20 days they'd need to be here."

There should be good record keeping, on the part of the Department, regarding advice given about the rules and regulations.

"With the Department, now, I won't take word-of-mouth on anything because if you get word-of-mouth on something on a phone call they can come back to you and say 'I never said that' and you can end up in court."

When a Departmental staff member leaves their position, there should be a good staff handover system.

"...staff turnover that quick you can't keep tabs on them..."

No-one mentioned use of emails or the website as good communication mechanisms. Some participants stated they did not have computers.

CONCLUSIONS

A systems diagram was created by focus group participants which demonstrated that there are many, complex factors that determine the focus group participants' demand for, and use of, water. Some factors particularly mentioned were cropping, weather, technology and historical decisions about the volume of water to attribute to licences.

This group assessed that some of the voluntary compliance dimensions were positively contributing to compliance (e.g. knowledge of the rules, low costs of compliance) whilst others were not supported as much (e.g. acceptance of the rules, respect for authority, social controls).

In the main, enforcement dimensions of compliance (or, rather, the perceived probability of enforcement) were seen to contribute to compliance. This was demonstrated through a perception, by the group, that inspections of water meters (a) would occur with adequate frequency, (b) would successfully detect non-compliance and that (c) a high proportion of detections lead to prosecutions. The penalties applied were also seen as adequate to deter illegal water use. Reporting of water sharing violations to the government by other water users, however, was unlikely, according to this focus group.

Electronic media (websites, email) were of least use in terms of effective communication mechanisms and face-to-face interactions were preferred. It was strongly suggested that any written communications be delivered in clearer and simpler English.

PROCESS FROM HERE

Focus group participants were asked to return comments on the draft report within a week of receipt of the draft report. This period has lapsed and no comments were provided.

The focus group workshop reports have been provided to the Department as they form part of the project deliverables.

The reports also provide an important foundation for water user interviews, which will be conducted in coming months. Again, water users in the Bowen and Coastal Burnett Groundwater Management Areas will be randomly selected from the water licence holder database and those selected will be requested to participate in the survey. The interviews will be likely conducted face-to-face at a locality preferred by the water user (on farm or in the nearest town).

In addition, these reports, combined with the results from the water user interviews will provide the foundations for a final report by the consultants to the Department about the topic of compliance by water users with S808 (that pertains to the illegal take of water) within the *Water Act 2000*.

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ATTACHMENT: FOCUS GROUP - GUIDING QUESTIONS AND PROMPTS

SPONTANEOUS COMPLIANCE DIMENSIONS

KNOWLEDGE OF THE RULES

Familiarity and clarity of legislation among water users

a. Familiarity

- · Do water users know the water sharing rules?
- Do they only need to make limited efforts to find out about the water sharing rules?
- · Is the legislation regarding water sharing not too elaborate?

b. Clarity

- · Are the water sharing rules formulated in such a way that water users can understand them easily?
- · Are water users actually capable of understanding the water sharing rules?
- Is it sufficiently clear to water users what the water sharing rules apply to?
- · Is it clear to water users what water sharing rule applies?

Points of attention

- · Use of extra educational materials
- · Use of general media (radio, TV, newspapers)
- · Giving advice through workshops, and trade organisations
- · Setting up a Helpdesk for questions
- · Providing information in other languages

Cost/ Benefits

The tangible/intangible advantages and disadvantages of breaking or complying with the rule, expressed in time, money and effort

a. Financial/economic

- · According to water users, does complying with the water sharing rules cost relatively little time, money or effort?
- Do they think that breaking the water sharing rules will yield little or no advantage in terms of time, money or effort?
- Do they think that breaking the water sharing rules could yield any disadvantages?

• Do they think that complying with the water sharing rules could yield any advantages?

b. Intangible

- Do water users believe that complying with the water sharing rules yield emotional or social advantages?
- Do water users believe that breaking the sharing rules yield emotional or social disadvantages?

Points of attention

- · Inspection pressure from the government (burden) can be diminished if the rules are abided by.
- · Financial rewards for compliance.
- · Extra effort or costs for non-compliance.
- · Emphasising good reputations or making them visible (quality marks)
- · Publish bad reputations (black lists).

DEGREE OF ACCEPTANCE

The degree to which water users regards the policy and the rules as acceptable

a. Acceptance of policy objective

- Do water users regard the water sharing policy (and the principles it is based on) as reasonable?
- Do water users feel they share responsibility for putting this policy into practice?

b. Acceptance of effects of policy

- Do water users regard the way the policy objective is being put into practice as acceptable?
- Do they regard the resulting water sharing rules that follow from this policy as acceptable?

Points of attention

- · Support among water users
- Take account of possible arguments put forward by water users: defending their own property, privacy, right to work and income, rights of the environment, judgement of seriousness of offence or damage caused, division of power and money in society, right of the weaker opposed to the stronger, political beliefs, religious conviction.
- · Water users' participation/involvement (interactive) in the policy-making process.

TARGET GROUP'S RESPECT FOR AUTHORITY

• The extent to which water users are willing to respect governmental authority

a. Official authority

- · Do water users generally abide by the rules?
- · Do water users generally abide by the water sharing rules?
- Do water users generally have respect for the water regulating authority?
- Do water users respect the judgement of those responsible for enforcement of water sharing rules?

b. Competing authority

· Are water users' own values in line with legislation?

Points of attention

- · Education
- · Attention to standards and values
- Emphasize respect for individual officers versus the government department

NON-GOVERNMENTAL CONTROL (SOCIAL CONTROL)

The probability, as estimated by water users, of positive or negative sanctions on their behaviour other than by the authorities

a. Social control

- Do water users feel that any water sharing violation would soon be noticed by its community?
- Does the water user community generally disapprove of such violations?
- If so, does the community try to correct this behaviour in some way or other?
- · And does this social sanction have an impact on water users?

b. Horizontal supervision

- · Is there any horizontal supervision, e.g. financial auditing, disciplinary codes, auditing for certification?
- Does this horizontal supervision contribute to better compliance with water sharing rules?
- Do water users see this horizontal supervision as an additional form of control? And does this horizontal supervision have an impact on water users?

Points of attention

- · Inspection possibilities by water users or professional group
- · Visibility of violations for passers-by, stakeholders, trade associations
- · Possibilities of informal sanctions: status, image, rejection from the group
- · Loyalty of inspectors or inspecting bodies towards those inspected.
- · Possibilities of (legal) pressure
- · Possibility of social control in effect encouraging violations

ENFORCEMENT DIMENSIONS

LIKELIHOOD OF REPORTING

The probability, as estimated by the target group, of a water sharing violation being detected by anyone other than the authorities and being reported to a government body.

- According to water users, is its community generally inclined to report detected water sharing violations to the authorities?
- · According to water users, are those exercising horizontal supervision generally inclined to report detected violations to the authorities?
- Do water users think that people generally know which government department to report detected water sharing violations to?

Points of attention

- The nature of the water sharing violations: not covering one's tracks, detection only possible by catching someone in *flagrante delicto*, can the violation be proved, c.f. also dimension 8.
- Interest of those detecting the water sharing violation in reporting it to the authorities.
- Fear of those reporting a water sharing violation of an (angry) reaction from the perpetrator.
- Encourage reporting by tip money or opening a tipline or complaints service

LIKELIHOOD OF INSPECTION

The probability, as estimated by water users, of being inspected by the authorities for possible water sharing violations

a. Records inspections

- · Is there a major objective likelihood of records inspections?
- Do water users think that there is a major likelihood of records inspections?

b. Physical inspections

· Is there a major objective risk of a physical inspection?

• Do water users think that there is a major risk of a physical inspection?

Points of attention

- Actual objective risk of inspection (number of inspections per year or per person/business, number of inspections per violation or per water user)
- Subjective risk of inspection and difference with the objective risk (depends on visibility of inspections, knowledge of inspection policy, prior experience with inspecting bodies, experiences of others, ideas on government activities and the impact of inspections)
- The accuracy of the inspecting body, response time of inspectors, impact of inspections by using auditing powers, show of strength, such as visibility of inspections, use of uniforms
- "Reward response" from the authorities: compliance is rewarded with fewer inspections (and vice versa)
- Inspection burdens may invade one's privacy, serious delays, costs to be borne by the person inspected.
- · Are inspections are always unpredictable (or else people will behave accordingly) by differentiating supervision and inspections (in the fullness of time) in terms of (1) frequency, (2) time, (3) depth and (4) place?.
- Are there a number of random inspections to keep them unpredictable?
 Also ensures that everybody always runs the risk of being subjected to an inspection.

LIKELIHOOD OF DETECTION

The likelihood, as estimated by water users, of a violation being detected if the authorities inspect

a. In a records inspections

- · Is all the data being checked in a records inspection?
- Is it easy for the inspectors to detect violations?
- · Is it difficult to falsify records?
- · Is there a major objective risk of detection in a records inspection?
- Do water users think that there is a major likelihood of detection in a records inspection?

b. Physical inspections

- · Is everything being checked in a physical inspection?
- Is it easy for the inspectors to detect violations?
- · Are violations restricted to a particular place and/or time?
- · Is the inspection technology used sophisticated enough?
- Is there a major objective likelihood of detection in a physical inspection?
- · Is the objective likelihood in a physical inspection large?

Points of attention

- The nature of violations (not covering one's tracks, detection only possible by catching someone in *flagrante delicto*)
- · Camouflaging violations (by screening off, hiding, changing the composition of indications of a violation, by misleading the inspector)
- Possibilities of tracing whom the actual perpetrator/responsible person is (consider legal structures, making the actual perpetrator not the legal addressee, the causal link between the violation and perpetrator is missing).
- The capacity of the investigating body: special expertise of techniques, which they need, sufficient resources available at investigating body.

SELECTIVITY

The perceived increased likelihood of inspection and detection of a contravention resulting from selecting the businesses, persons, actions or areas to be inspected

- Do offenders have the impression that they are always inspected more frequently than those who comply with the water sharing rules?
- Do selective inspections find more offenders, relatively speaking, than non-selective inspections?
- Do water users believe that the enforcement agency is capable of 'separating the chaff from the wheat'?

Points of attention

- · Targeting
- · Violation ratio in random and selective inspections
- · Cost of the discovery of a water sharing violation
- · Possibilities of setting up databases
- · Possibilities of linking files from various enforcement organizations

LIKELIHOOD OF SANCTION

The likelihood, as estimated by water users, of a penalty if a water sharing violation is detected in an inspection

- Is there a major objective likelihood of a penalty being imposed once a water sharing violation is detected?
- · According to water users, is it easy to prove a water sharing violation?
- Do water users estimate the likelihood of a penalty as a result of a detected violation as being high?

Points of attention

- · Lack of capacity
- Lack of evidence

- · Social relevance of the offence (policy to dismiss charges under certain conditions e.g. minor violation)
- · Legitimate non-enforcement policy of the enforcement body
- · Errors in the implementing or enforcement bodies.

SEVERITY OF PENALTY

The severity and type of penalty associated with the violation and additional disadvantages of being penalised

a. Severity of penalty

- Do water users know what penalty they face in the event of a violation?
- · Do they regard it as severe?
- · Is the penalty imposed quickly?
- Does the enforcement of the penalty have any additional tangible or intangible disadvantages for the person concerned?

b. Damage to reputation as a result of penalty

· Do water users mind that it becomes known that have been penalised?

Points of attention

- · Disadvantages of penalty for the person concerned
- Types of sanction: financial, damages, goods seized, deprivation of illegally obtained profits, imprisonment, restore to legal situation, alternative punishments, withdrawing rights and favours, bringing business operations to a halt, etc.
- · Additional disadvantages of enforcement
- · Social status, reaction of community, court fees, legal fees, costs of furnishing proof
- · Financial capacity of perpetrator
- · Psychological effects, such as the manner of presentation and public nature, speed with which a sanction is imposed, the "appearance" of the sanction system applied: criminal law, disciplinary rules, administrative law, private law.
- · Possibilities of alternative penalties