

A checklist for goal setting for INFFER analyses

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The establishment of a “SMART” goal is crucial when undertaking an asset analysis using INFFER.

“**S**pecific” means that the goal is described in a precise and unambiguous way.

“**M**easurable” means that the goal definition is based on a variable which is able to be monitored and recorded reliably and without going to unreasonable expense to do so.

“**A**ttainable” – A goal is more likely to be attainable when you plan your steps wisely and establish a time frame that allows you to carry out those steps. Thinking about attainable and realistic goals at the same time is useful.

“**R**ealistic” - To be realistic, a goal must represent an objective toward which everyone is both willing and able to work. A goal can be both high and realistic; be sure that the goal represents substantial progress.

“**T**ime-bound” means that a particular date is provided by which time the goal will have been achieved. The time frame for the goal can be of any relevant duration. The time-frame of achieving goals is related to the time for reasonable ecosystem response and costs.

The goals you specify should focus as much as possible on achievement of outcomes for the asset, rather than activities or outputs. Many users find it practical to specify these goals over a time frame of about 10 years, but in practice the time frame may vary. The goal may include a probability of success.

It is worth thinking of your first go at this task as an interim SMART goal. You are likely to want to modify it after looking more closely at some of the questions that INFFER asks. You may also want to alter it after seeing the Benefit: Cost Ratio for the project you have developed around the goal set for the asset. It is actually a good idea to assess more than one goal for the same asset, if time and resources permit, so that you can make a well-informed decision about the scale and ambitiousness of the project that offers the best value for money.

The specification of a SMART goal is crucial to the whole INFFER process. It drives all that comes after. From here you will be specifying the works and actions that would be needed to achieve the goal, assessing the feasibility of achieving the goal with those works/actions, considering the adoption of the works, the choice of policy tools, and the cost of the project. All of that flows from the goal you specify.

A specific goal has a much greater chance of being accomplished than a general goal. To set a specific goal you must answer the six “W” questions:

- Who: Who is involved?
- What: What do I want to accomplish?
- Where: Identify a location.
- When: Establish a time frame.
- Which: Identify requirements and constraints.
- Why: Specific reasons, purpose or benefits of accomplishing the goal.

When selecting the goal, it is important to anticipate the technical feasibility of the goal (which implies paying attention to the causes of the threats), and the adoptability of works that would be required to achieve the goal. You may need to return and revise the goal later once issues like technical feasibility and adoptability are considered.

Setting the right goal is a balancing act. If you specify a goal that is very difficult to achieve (e.g. returning a large degraded asset to near pristine condition), the works required to achieve it will be much more extensive, much more expensive and much less adoptable than for a modest goal. If your goal is very challenging, this will be reflected in the INFFER analysis through the ambitious and expensive actions required. Depending upon political realities and/or budget constraints, you may have to come back and moderate the goal, or set this project aside in favour of one with a goal that is more feasible. On the other hand, if you set the goal too low, the project will not be very attractive in terms of actually achieving worthwhile environmental outcomes. You have to balance these tensions between the goal being do-able, and it being worth doing.

* See Table below for examples of SMART goals and additional explanatory notes

Examples of SMART goals (developed as part of INFFER projects)

Asset	Goal	Notes
Gippsland Lakes and associated variably saline wetlands	<p>a. To reduce the frequency of major algal blooms to 1 in 10 years over a 20-year period, commencing in 2010.</p> <p>b. To achieve a P reduction target of 40% by 2030 (based on the 10-year average P load entering the Lakes).</p>	Climate change is expected to influence the frequency and severity of extreme events (e.g. drought, wildfire, floods) that can deliver large nutrient loads to the Lakes. With the current knowledge available it is not possible to predict the impact of climate change on the Lakes.
Fire sensitive vegetation communities of the Hamersley Ranges	<p>Within 5 years, to:</p> <p>a. Maintain 100% of topographically protected sites in 2009 condition.</p> <p>b. Maintain recruiting status of all existing mulga on low slope communities</p> <p>c. Establish and maintain spatial and temporal fire history heterogeneity within 100,000ha units of Spinifex dominated vegetation communities across the identified project area</p>	Includes maintenance of geographical extent. Determine condition using indicator species such as <i>Callitris</i> : measure the distribution of mature and recruiting individuals to quantify health or otherwise of the occurrence
York Plains Wetlands	<p>a. To increase the extent of native vegetation by 300 ha from 700 ha to 1000 ha by 2015.</p> <p>b. To increase the average habitat hectare score of remnant vegetation patches across the asset area by 10% by 2014.</p> <p>c. To lower the watertable to a depth of greater than 2 m (except for gross seasonal fluctuations in excessively wet years) over the capture zone (8,400 ha within and immediately surrounding the York Plains, as assessed by catchment modelling) by 2019.</p>	Baseline habitat hectare data is available and has been used to develop this goal.

Examples of non-SMART goals (real examples from real plans and projects from multiple sources)

Asset	Goal	Comment
Seven threatened fauna of the Riverina Bioregion	a. Reduce fox numbers in the project area by 50%. b. Implement 80% of high priority actions at high priority locations as per the ABC database.	<ul style="list-style-type: none"> • Goal is not specific to the asset • Need to specify how the actions will lead to a change in the asset • Are the priority locations known?
Water quality and soil	a. Improve water quality and prevent, stabilise and reverse trends in dryland salinity affecting identified assets. b. Make a significant contribution to financially viable and resilient farming systems that are adaptive to change.	<ul style="list-style-type: none"> • Assets not specified or spatially explicit • Time frame not specified • What aspect of water quality? What are the baselines values? Is it stabilise or reverse? • What constitutes a significant contribution? • What is meant by a resilient farming system? Not measurable.
Upper XX River	Protection and rehabilitation of aquatic habitats for Macquarie perch in the upper XX river. This will also provide benefits for other aquatic species with associated improvements in water quality and overall ecosystem health.	<ul style="list-style-type: none"> • Time frame not specified • Asset is perhaps the Macquarie Perch rather than the river • Protection is an action rather than an environmental outcome • Water quality goal is not specific • Ecosystem health is vague and unlikely to be measurable. What is the baseline?

The following checklist has been developed to assist in the development and critique of SMART goals.

Goal component	Item	Response	Suggested remedial action	Notes
Specificity	Is the goal specific to an attribute/s of the asset?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Make the goal more specific to an asset attribute that clearly links to its values	Some goals may be specified in terms of a degree of threat reduction rather than a change in asset attributes. For example reducing fox numbers in order to increase shorebird numbers.
Measurability	Are these attributes measurable?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Consider other attributes that may be measurable	Establish concrete criteria for measuring progress toward the attainment of each goal you set. To determine if your goal is measurable, ask questions such as.....How much? How many? How will I know when it is accomplished?
	Is there an accepted and reliable method/metric that can be used to detect change?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Consider using a surrogate	
	Is baseline data available?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Build collection of baseline data into project	Need to distinguish between empirical and modelled data
	Is the data reliable? What confidence do you have in this data?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Seek expert/third party opinion	
Time-bound	Can a time frame for goal achievement be specified?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Review goal specificity and consider different asset attributes where a time frame can be stated	A goal should be grounded within a time frame. With no time frame tied to it there's no sense of urgency. "Someday" won't work. Additional ways to know if your goal is realistic is to determine if anything similar has been

				accomplished in the past or ask yourself what conditions would have to exist to accomplish this goal.
	Are you likely to be able to measure an asset response in the given timeframe?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Adjust time frame	
Appropriateness	Are reasonable on-ground actions available that will lead to an asset response?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Have all possible actions been considered?	
	Are you confident these actions are technically feasible?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Seek expert/third party opinion	This is about understanding of causality
	Can these actions being applied at a scale that relates to the required asset response?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Review project scale and reduce goal limit.	
Realism	If achievement of the goal requires adoption of new practices by private citizens are they likely to occur at scale within the given timeframe?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Seek advice on likely landholder adoption. Review project scale and reduce goal limit.	
	How confident are you that key stakeholders will support the goal?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Test with key stakeholders and/or involve in goal development.	
	Given all other factors considered so far is the goal realistic?	<input type="checkbox"/> Yes <input type="checkbox"/> Maybe <input type="checkbox"/> No	Define which aspects of goal are suspect and review accordingly.	In other words ... does it pass the "laugh test"?