SOCIAL IMPACT ASSESSMENT

GUIDELINES FOR THRIVING REGIONS AND COMMUNITIES

C. Nick Taylor and Mike Mackay

National SCIENCE Challenges

BUILDING BETTER HOMES, TOWNS AND CITIES

HE KĀINGA WHAKAMANA TANGATA, WHAKAMANA TAIAO

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agresearch

āta mātai, mātai whetū

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FOREWORD

WHY SIA GUIDELINES?

These guidelines provide a practical approach to Social Impact Assessment (SIA). They are designed to help readers learn the basics about how to conduct an SIA, contribute to an SIA, use the results of an SIA, and judge if an SIA is fit for purpose. When writing the guidelines, we have assumed that readers may have little or no prior experience with SIA.

The need for guidelines for SIA became apparent during our research with regional communities experiencing the social impacts of economic regeneration projects, including infrastructure, housing, irrigation, tourism and heritage conservation.

During our work, we encountered many community leaders who were keen to learn how to assess the social impacts of the plans they design, how to take this information and use it to make decisions, and then, overtime, evaluate the outcomes for communities.

When writing and testing the guidelines, we drew on our own professional expertise in SIA, and the experiences of potential guideline users including: community organisations, iwi members, central government agencies, local government economic development and planning professionals, infrastructure providers, sector groups, evaluation practitioners, consultancies, students, and academics.

We also drew on the ideas of practitioners of SIA in conferences and training sessions[1], and other invaluable sources that are listed in the Annexes.

SIA looks at the potential impacts of change proposals[2], focusing on who is affected, where and how, and what might be done to improve the results in the short, medium, and long-term.

We expect that the guidelines will be useful for anyone proposing changes that affect people and communities, as well as those experiencing social impacts.

ORGANISATION AND STYLE OF THE GUIDELINES

The guidelines are organised to take readers through what an SIA does, with examples of how it is applied.

We start with a definition of SIA and why the process is important from early in planning any change (Section 1). This is followed by an explanation of social impacts, covering what they are and how we can describe them (also Section 1).

In Section 2, we cover the basic steps in an SIA:

- Scoping an SIA so it is focused on the main issues of concern to people and communities.
- Gathering information about the social baseline – the starting point for understanding what is changing.
- Assessment of alternative options or planned actions.
- Monitoring, mitigation, and management of impacts for optimal social outcomes.
- Evaluation and auditing of those outcomes.

We then discuss why it is important for an SIA to engage meaningfully with affected people and communities, including how to make use of the data (or 'local knowledge') provided by them (Section 3).

The data theme continues in Section 4, where we note that an SIA should include social data – information and ideas that you can observe and describe, as well as information you can count. Both types of data are important.

Finally, in Section 5, we note that social change is often complex and will include positive and negative impacts, which are often distributed unevenly. So, the process of doing an SIA must include thinking about the best ways to manage social change so that the most sustainable, positive outcomes are achieved for people and communities.

Throughout the guidelines are examples of how SIA is applied. These examples are generic and imagined. They draw on our practical experiences doing SIA (see Annex 3 for a list of the material used).

[1] Including the NZ Association for Impact Assessment conference on social impact assessment in Christchurch, April 2021.

[2] Projects, policies, strategies, and/or plans.

In Aotearoa New Zealand, indigenous Māori world views, rights, and interests are integral to Treaty-based decision making and community development. The guidelines use some common Māori words and terms, with footnoted definitions. Māori protocols and processes are acknowledged. There are general observations throughout relating to indigenous peoples.

Māori often prepare cultural impact assessments that cover social and cultural impacts usually in an historical context. These SIA guidelines are not for cultural impact assessment, but do provide ideas about how the allied knowledge and assessment systems can complement each other.

ABOUT THE AUTHORS

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Nick is an expert in social impact assessment. He has broad experience applying SIA to planning and policy making in his home country, Aotearoa New Zealand, and internationally. He has developed concepts and methods in SIA and published widely, including the third edition of Social Assessment: Theory, Process and Techniques in 2004. Nick is a Past President of the International Association for Impact Assessment and an active member of the affiliate NZAIA.

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We acknowledge collaboration that has taken place during the BBHTC research with the Waitaki District Council, Stronger Waitaki, the Waitaki Housing Task Force, and stakeholders in social services and economic regeneration.

The guidelines benefitted from work commissioned by several other organisations including with Environment Canterbury, the Ministry for the Environment, and AgResearch as they developed strategies for better land and water management.

We also acknowledge the helpful comments and contributions of Cilla Taylor, Richard Morgan, James Baines, and Louise Thomas.

1. WHAT IS SIA?

SIA provides a way for community groups and organisations to participate from early on in forming plans and making decisions. The reasons for doing an SIA are either because it is required through regulations, or as part of socially responsible development. In this section we discuss these reasons for doing an SIA, and provide examples. We also explain what social impacts are, how they can be described, and how they are often linked to other kinds of impacts.

SOCIAL IMPACT ASSESSMENT (SIA)

SIA is a process that provides information to decision makers and affected people when planning for change. The process assists them to balance economic, social, and environmental needs, and to promote equitable and sustainable development.

SIA does this by helping people to:

- Identify social impacts well in advance of a decision being made.
- Design mitigations that will reduce negative social impacts, while enhancing those that are positive.
- Manage social impacts once a change is underway.
- Monitor longer term community outcomes, and respond where needed to enhance living standards, social equity, sustainability and social-cultural wellbeing.

WHY CONDUCT AN SIA?

Many SIA are done because they are required through legislation and regulations to assess the potential social impacts of a proposal, as found in legislation governing the management of natural resources and the built environment.[3]

SIA may be required during the planning of:

- Development projects in order to meet requirements for social safeguards by donor agencies and development banks, and/or for formal consents from planning agencies and decision makers.
- Programmes - when the components of a programme, singly or together, have to meet requirements for consents.
- New or revised policies and plans - from national to local - to meet requirements for assessment and evaluation of costs and benefits.
- New or reformed national standards, laws and regulations - to meet requirements for regulatory impact statements.

There are also uses of SIA that are not required by legislation, but contribute to socially responsible development. These include SIA used by:

- Corporate organisations and business sectors to obtain a "social licence to operate" by demonstrating their commitment to positive community relationships, and to good social and environmental outcomes;
- Responsible corporate organisations in an effort to understand, manage, and formally report on the impacts of their actions and activities;
- Community groups and social services looking to develop and manage local strategies of action and development programmes, such as a local housing strategy or a new cycle trail for visitors; and
- Social development and funding agencies, social enterprises, and philanthropic organisations to identify social needs, demonstrate the net social impacts of their actions, and evaluate longer-term changes in social outcomes.

[3] In Aotearoa New Zealand the principal legislation requiring SIA at the time of writing is the Resource Management Act (1991). This act is under review, so explicit references are not made to it in these guidelines. Other countries have their own requirements, as do international development banks and agencies.

The following two examples illustrate different reasons for doing SIA.

EXAMPLE 1: AN SIA REQUIRED BY LEGISLATION FOR RESOURCE CONSENTS FOR A WASTEWATER PLANT

A council was required to obtain consents to put treated wastewater into the ocean. The alternative was to continue to put the wastewater directly from sewerage ponds into a nearby river and estuary. An SIA was part of the technical investigation and the application for consents, along with a number of other assessments.

The council and SIA team developed a plan of engagement with key stakeholders to obtain data on their uses of the river, estuary, and nearby beaches, and their preferred outcomes, which were focused on improving water quality. Through interviews, meetings, and targeted surveys, the SIA found the beaches, estuary, and river were widely used for water-based recreation such as boating, swimming, surfing, and fishing. The river and estuary were also important for gathering food and mahinga kai[4]. People biked, walked, and camped in the area too.

Findings from the SIA, alongside assessments of impacts on oceanography, water quality, and marine ecology, contributed to a preferred solution for disposing of the wastewater through an ocean outfall for the best long-term outcomes for the environment, including for people and communities. Initial anxieties of local residents and beach users were largely about the impacts of an outfall on water quality (river and ocean), and these concerns were reduced by ongoing engagement about the results of technical assessments.

The consent to proceed included controls on the location and length of the outfall, how it should be constructed with minimum disturbance of residences and the coastal environment, and monitoring of impacts on the river, ocean, and human health.

EXAMPLE 2: SIA IDENTIFYING SOCIAL NEEDS AND A STRATEGY FOR SOCIAL SERVICES

A social service agency decided to conduct an SIA to identify social needs and gaps in services in a rural area and develop a strategy to meet needs better. Identified needs were a lack of parenting skills in some families, inadequate support for youth activities out of school, more support for migrant workers and their employers, and a desire by the older elderly to age in place.

The SIA obtained a description of the current situation with baseline data on the population and other social statistics, a survey of social service providers, and discussions with local community workers.

Workshops in rural and urban settlements, and a regional workshop, helped to develop actions and priorities into a strategic plan with the SIA team helping to facilitate these activities.

The SIA also provided a plan for managing change, with a framework for documenting the results of the strategy and evaluating outcomes for social wellbeing. Funders of different community services were able to use this information to guide their decisions.

Participation in the SIA supported further collaboration between management agencies, key organisations, and community groups.

[4] Food gathering and the cultural protocols and activities around that activity.

WHAT ARE SOCIAL IMPACTS?

A social impact can be described as any change to people's lives, planned or unplanned, that arise from human actions or naturally occurring events (see Table 2 on page 10 for a list of sources of social impacts). These changes to people's lives can be interpreted as positive or negative.

In broad terms, SIA practitioners focus on changes to the wellbeing of people and communities. Social wellbeing is a concept that comprises people's:

- Lifestyles (including leisure and recreational choices).
- Livelihoods (including jobs and employment opportunities).
- Cultural values, norms, and traditions.
- Sense of social connectedness.
- Safety.
- Health and wellbeing.
- Sense(s) of place.
- Resilience to risks and threats.
- Physical surrounding (natural systems and the built environment).
- Human rights and civil liberties.

It is important to start an SIA with a broad picture of what contributes to social wellbeing for the subject area. A holistic approach to SIA sees social, natural, human, financial, and physical capitals, which combine to provide wellbeing and resilience in the face of change.

Recognise, too, that indigenous world views are holistic and see environmental, social, and economic systems as interconnected. They value collective effort with a strong emphasis on sustainability between generations.

Building on practical experience with SIA, Table 1 (page 9) depicts this broad picture, and provides the basis for a table of indicators, but note that each specific SIA must develop a list for the particular social environment.

SOCIAL LIFE	POTENTIAL IMPACTS ON SOCIAL LIFE
Population and settlements	The number of people, who they are (gender, ethnicity, age), their households, where they live, and property ownership and rights
Livelihoods and income	How people and households meet their daily needs, including employment and business activity, and also the ability to collect, catch, grow, and exchange food
Community and equity	Who make up the community and how it functions, resilience to change, leadership and political systems, collective action and cohesion, gender differences, and social exclusion
Places, beliefs, and practices	People's sense of place, where they live, how they play, and how they interact each day, shared beliefs, language, attitudes, customs, practices, stewardship, obligations, values and stories, heritage, and sacred places
Land uses	Urban/rural uses of the land, types of agriculture and food production, urban form, uses of natural resources (land, water, ocean), and conservation practices
Infrastructure	Transport (how people move around), water supplies, waste disposal, flood protection, telecoms, and the built environment
Health and wellbeing	Physical and mental health, social welfare, hazards and safety, environmental quality, levels of ability and vulnerability, and spiritual wellbeing
Services	Hospitals and schools, retail and shops, social services, policing, public agencies, media, and social media and access to social services
Recreation and cultural values	How and where people play and relax, commercial and community recreation, sports facilities and activities, access to open space and quality natural areas

Table 1: Our experience with doing SIA over many years shows there are aspects of social life that assessments typically consider. Of course, those that apply in any SIA will depend on the context.

Note: It is useful to refer back to this table in later sections of these guidelines.

SOURCES OF SOCIAL IMPACTS	PEOPLE AND COMMUNITIES TYPICALLY AFFECTED	INVOLVEMENT OF INDIGENOUS PEOPLE
Projects of producers, e.g., irrigation schemes, mining/quarries, aquaculture, food processing plants	Rural areas and regions, councils, land owners, residents of small settlements, rural lifestyle areas, provincial towns, recreational users, and visitors	Leaders, elders and leadership councils for a tribe or subtribe[5] and members involved in protecting indigenous resources and sacred sites[6]
Infrastructure projects such as highways, wind farms, hydroelectricity transmission lines, waste management	Local government, land owners, local residents, small settlements, provincial towns, regional labour and housing markets, and recreational groups	As above, plus members involved in training and capacity building
Visitor infrastructure plans and projects such as cycle ways and walking trails, ski fields, hotels and resorts, shopping facilities	Land owners, farmers, hospitality businesses, heritage interests, councils, residents, recreational groups	As above, and business and hospitality operators and workers
Tourism strategies, conservation management plans, significant natural area plans, national park plans	Conservation groups, councils, small towns, recreational groups, hunters, fishers and food gatherers, concession holders, and hospitality	As above
Economic development and regeneration strategies, iwi (indigenous) strategic development plans	Local government, economic development agencies, sector groups, worker organisations, business leaders and operators	Tribal leaders, Treaty claimants, those developing human capacity and creating opportunities for businesses and livelihoods
Land and water plans, biosecurity plans, predator control programmes, forestry rules	Conservation agencies and groups, Local government, farmers, foresters, biological businesses, sector organisations, and community conservation groups	Indigenous world views, cultural values and knowledge relating to water and land integrated into the assessment process[7]
Plans and plan changes by councils such as rules for new subdivisions, commercial and industrial activities	Residents, businesses, land owners, developers	Tribal leaders and their research and consulting groups and members
Community development plans, programmes and projects, grant giving and philanthropy	Social agencies, social service providers, community groups, social enterprises	Tribal leaders and members involved in designing, delivering, and using social services
International development assistance/ foreign assistance, humanitarian aid, and multilateral financing	Partner organisations, project beneficiaries, women, children, customary owners, affected communities, displaced people	Iwi partnering in international relationships and developments including those involving indigenous peoples
New or reformed national policies legislation or regulations by government agencies	Government agencies, sector groups, and national representative groups	Collaborative development with Treaty partners and analysis of impacts on Iwi cultural values

Table 2: This table shows possible sources of impacts, and gives an idea of who might be affected, as well as how an SIA can involve indigenous people.

[5] In Aotearoa these include iwi, hapū, iwi researchers, and consulting groups
[6] In Aotearoa these include wāhi tapu, taonga, and mahinga kai
[7] Ki uta ki tai (from the mountains to the sea)

DESCRIBING SOCIAL IMPACTS

There are different ways to describe impacts as presented in Table 3 below. Column 1 in the table shows "social" is one of a number of types of impacts that people and communities will consider important. All types of impacts can result in social impacts, as we discuss next. Column 2 shows the various ways to understand and describe any impact.

Impacts are also evident in time. They are either predicted before an action takes place, or evident after an action that causes them (refer to the bottom of Table 3).

It is useful to remember that even when a process of change is underway new impacts might get predicted, especially as a consequence of the ways they are managed, and also because of changes to proposals as they develop.

In addition to predicting change, SIA help affected people to understand actual impacts when they happen, so that changes are managed for the best community outcomes.

For example, consider how a new processing factory requires a workforce in the short term to build it, and in the longer term to operate it. These impacts are highly probable. Each phase requires different workers and sets of skills. Also, the workforce requirement could affect a local and a regional labour market as sources of workers.

Incoming workers might have problems settling in, but this impact will depend on available housing and having appropriate social support mechanisms in place. So, the workforce impacts could be either, or both, adverse and beneficial depending on how well the workforce impacts are recognised in advance and this impact is managed.

The factory demand for workers could be a one-off if the new factory stands on its own, but multiple if it is part of an industrial development involving several factories. It is reversible if the factory closes.

Multiple impacts can become cumulative when they aggregate (in space) or accumulate (over time).

THE MAIN TYPES OF IMPACTS	WAYS TO DESCRIBE IMPACTS
Social	Short | Long Term
Physical	High | Low Probability
Ecological	Adverse | Beneficial
Economic	Direct | Indirect
Health	Localised | Widespread
Cultural	One-off | Multiple
	Reversible | Irreversible
IMPACTS IN TIME	
Predicted (before) ⋯⋯➤	**Actual (after)**

Table 3: The main types of impacts and ways to describe them

LINKING SOCIAL IMPACTS

"Recognise impact chains"

When an impact causes other impacts in a series, there is an impact chain. The chain often starts with an impact that is not obviously social.

For example, pollution of water in a stream can affect the ecology of the stream. As a result, people may stop using the stream to collect water, swim, or fish.

Some social impacts lead on to other ones, as when an extra job in a rural community attracts a young family whose children attend a local school and help to attract an additional teacher, who also joins the volunteer fire brigade building social capital in the community.

A surface mine can create dust that affects the health of workers and the surrounding residents if not managed properly. As a result, young families may choose to leave the area and the school loses pupils and a teacher, so social life in the community is reduced. The community becomes divided between those who supported the mine for the employment it creates and those who opposed it for the effect it has on the environment and on community health.

Figure 1 (below) shows how these impact chains link together into social impacts. Think about the chains shown here. For example, a chain starts with taking water from a stream for irrigation, which leads to agricultural intensification, which produces extra jobs (employment and income) and boosts local business, which keeps people living in rural areas including young families (population), and benefits the local school.

At the same time, agricultural intensification can lead to increased nitrogen in waterways, which affects the ecosystem health of a stream through the area, which affects the values people place on the stream. It also affects the values residents of local communities and visitors place on being close to the stream and the natural setting it provides. These changes affect uses of the stream as a source of food and cultural practices, and for outdoor recreation such as swimming or recreational hunting and fishing.

In addition, recreation and tourism help to keep local businesses going and help to promote the place to new workers, residents, and visitors. These impacts ripple through the local visitor sector and the wider economy.

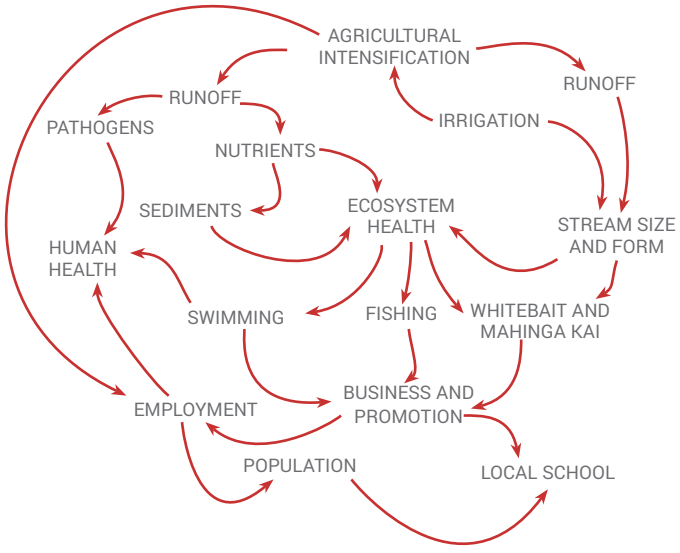

Figure 1: Using the example of agricultural intensification, this diagram shows how impact chains link together into social impacts.

2. DOING SIA

In this section we describe how you do SIA in a cycle of design and implementation for proposals. Activities in the cycle are scoping, developing the social baseline, considering alternatives, management of change, and evaluation of outcomes.

THE SIA PROCESS

"Think of SIA as a cycle"

SIA is often depicted as a series of activities that build on each other over the steps of designing and planning a proposal, and then implementing it. Some activities necessarily precede others, but it is best to think about the whole process as a continuous cycle focused on identifying and managing social change from the start of developing a proposal (figure 2). This means that the activities of an SIA can build information over time for the best outcomes.

The design and planning stage is the most practical time to adapt a proposal by working through alternatives to get the best results. This process requires working out the best ways to avoid or manage negative impacts and to enhance the positive ones when changes start (i.e., during implementation).

A proposal should start off with a set of ideas that are developed and improved as alternatives are explored, including with people and communities affected by the proposal. How to engage people in the process is discussed in Section 3.

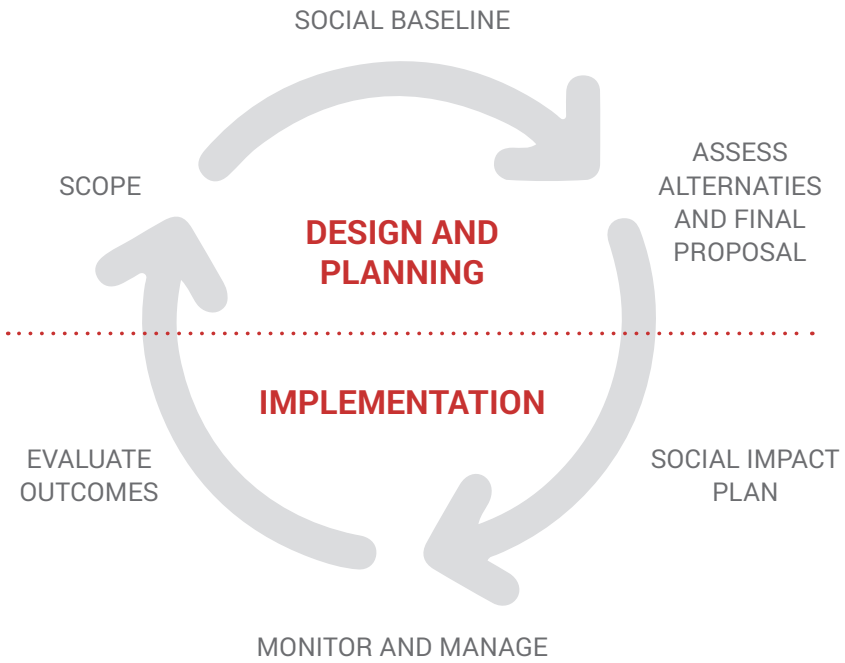

Figure 2: The SIA cycle. SIA is a series of activities that build on each from design and planning, through to implementation.

EXAMPLE 3: AN SIA HELPS TO INFORM PROJECT ALTERNATIVES AND DESIGN

When designing a large irrigation project, the planners proposed to build a storage reservoir that would provide reliable supplies of water but flood much of a valley. Up to 40 farms would end up being all or partly flooded.

The SIA found there would be significant social impacts on this rural community if farmers were displaced within the valley or to other places. The farmers were clear that the loss of their farms, even at fair prices, could not compensate for generations of family history lost.

The benefit of a new recreational lake in the valley was limited because the lake would get drawn down in the hot, dry summer for irrigation just when people would want to use it for boating or swimming.

Informed by the SIA, a decision was made to redesign the project so that it used run-of-the-river water and farmers were encouraged to build individual storage ponds to increase the reliability of their water supply when river flows were low. The SIA also found there were high-value recreational uses of the source rivers, so minimum flow restrictions were essential in summer to maintain river flows, ecosystems, and social values.

SCOPING AN SIA

"First up, scope your SIA"

Scope the assessment to start with so the effort is focused on the likely impacts, affected areas, and key issues for a proposal. Scoping an SIA always precedes the detailed assessment work.

Scoping seeks to understand the proposal and the background to it, the location(s) of the changes proposed, and the people affected. Maps and plans are essential. They help to understand how an area is administered and where different boundaries lie; for example, council and iwi boundaries, school zones, and statistical areas used for census data, etc.

To scope an SIA:

- Have detailed discussions with the people proposing a change and with other technical experts already considering the proposal or helping to design it. An early and full understanding of issues and effects comes from discussions with other people involved in assessing a proposal, such as ecology, landscape, economics, or cultural experts. Scoping is a good time to build an integrated approach between the experts.
- Develop an overview of the social environment and its people and places. Usually, these tasks require early site visits. As the scoping proceeds start understanding what, how, and why different areas and people are affected. This begins the social baseline. Table 2 (page 10) helps here as a check list.
- Prepare an initial list of possible social impacts. It is important to keep an open mind as to what goes onto the list because some social impacts result from other impacts including economic, cultural and environmental impacts. The list of possible impacts on social life in Table 1 (page 9) should provide a useful starting point.
- Develop an initial understanding of the possibilities for avoiding, reducing, enhancing, and managing particular impacts so that this information is available to the process of planning. With an early understanding of the proposal, the place, and the social context, it is important to consider who are the key stakeholders and the best ways to engage with them.
- Create a chart of stakeholders, alongside issues and possible impacts, and begin an engagement plan based on this information.

EXAMPLE 4: AN EXAMPLE OF SCOPING THE SIA FOR A MAJOR HYDRO-ELECTRICITY PROJECT ON A LARGE RIVER

The project was to take water from the river, through a canal and underground power station, and back to the river via a tailrace tunnel. An SIA was necessary to obtain the necessary consents.

Scoping of the project provided an understanding of the environmental and social impacts of the project, including those on farmers in the project footprint, people using water downstream for irrigation, those hunting and fishing along the river and collecting food, operators taking aggregates from the river, and residents of nearby towns. Issues included the size of the residual flow affecting recreational users, dust from earthmoving in a dry and windy area, and haul roads affecting residents and farm land, and a large incoming workforce required to build the project.

The scoping revealed that construction would take at least five years and the small local labour market would not be able to supply sufficient skilled workers such as specialist tunnelers. Incoming workers would require a temporary camp, which required a detailed assessment of the local workforce, their skills, and the potential effect on other sectors, if they drew on workers such as farmers experienced with heavy machinery drawn to the project. The scoping also showed it was important to consider the local supply of suitable housing, including holiday homes in the area, and the best places to site a construction camp. Scoping showed the SIA should consider how to manage incoming workers to reduce their negative impacts on the host community, and how to achieve positive impacts for the local economy.

CREATING A SOCIAL BASELINE

"Describe the social baseline"

An SIA needs a description of the existing social environment, which is the social baseline. It is called the baseline because this is the point from which change happens.

The baseline includes data about the social conditions, community, and way of life before any changes that a proposal might bring. It usefully includes a social overview of important features and social trends. For example, is the population size increasing or decreasing over time?

Preparation of the social baseline should start during scoping, when it is necessary to identify the likely impact areas and the focus of the assessment. If, for example, the scoping suggests that the proposal is likely to affect the amount of water in a river then it is important to describe all the uses and users of that river system. If a key issue emerges later in the SIA then add to the baseline to cover it.

In the first instance, use secondary data to compile the social baseline - these are data someone else has collected. Often these are official statistics reporting population, business, employment, housing, schooling, health, or crime data. As a rule, an SIA does not start gathering new data until all other sources are considered, and until the scoping of the SIA has provided some insights into what the important issues are.

The social baseline includes an understanding of the current social and environmental conditions into the future. For example, long-term changes due to climate change may cause a change in the pattern of settlement as homes move away from natural hazards, such as flood plains.

Common changes happening anyway could include, for example, an increase in the number of older people in the population, increased cultural diversity with immigration, or an increase in skills due to training programmes.

Knowledge of these underlying trends assists with the description of social impacts by making clear if the cause of a change is due to the proposal or something else. And could various sources of change combine? Update the overview as the SIA progresses and when it is necessary to consider an additional issue.

This list describes some of the information typically included in a social baseline:

- Description of the population and demography (e.g., total population, ages, ethnicity, length of residence).
- Description of the local and regional economy, employment, sources of livelihoods, and potential links between sectors, e.g., between primary production, processing, and transport.
- Description of landscape, heritage, and natural features that form part of local lifestyles (such as outdoor recreation like hunting, fishing, or boating) and attract new residents and visitors.
- Description of community organisations, leadership, volunteering, and social capital - the parts that add up to the ability of a group of people to act in their collective interest and build resilience.
- Analysis of significant social, cultural, and environmental values in the area, and the presence of Māori (indigenous) values. These values may be associated with a particular resource that the proposal could affect or part of traditional practices and knowledge more generally;
- Maps of areas of influence of public agencies such as local authorities, planning zones, land uses, settlements, or tribal boundaries. Using GIS, these maps are often portrayed as layers.
- Documentation of data sources, definitions or interpretations of key sources, with discussion of the assumptions underlying the analysis, the reliability of data and any biases, and any inconsistencies or gaps that might affect the analysis.

ASSESSMENT OF ALTERNATIVES

SIA helps to assess and decide on alternative plans, which should be considered, screened from different viewpoints including cultural, ecological, health and safety, economic, and social.

SIA helps planners and affected people to think about each alternative on the table and form views about them based on their likely social outcomes.

As alternatives are whittled down in number, the SIA goes into their potential impacts in more depth, outlining scenarios of likely change. The final option is investigated in detail for its social impacts prior to a decision to proceed or not.

Experience with SIA shows that it is useful to recognise a series of steps when assessing the identified impacts. Apply this approach to avoid, reduce, enhance, or remedy impacts until a proposal is fully designed, agreed, and implemented:

- **Avoid** - plan the proposed change differently to avoid negative impacts.
- **Reduce** - alter actions or add mitigations to reduce negative social impacts.
- **Enhance** - alter or add to the proposed change to enhance impacts and outcomes.
- **Remedy** - if there are still negative social impacts after the above steps, look for ways to compensate individuals or communities.

It is best to consider how to avoid or reduce negative impacts and enhance positive ones from the start of design and planning, as part of considering alternatives. Particular alternatives are re-designed or rejected as a result of all parties knowing about the potential impacts on people and communities and the ability to manage them.

A proposal can take further shape through a formal decision-making process of official reviews and hearings, as the effects are weighed up in detail and decisions are made about managing impacts and getting the best results from a proposed change.

Scenarios are a useful method for assessing alternatives plans when there is a complex set of changes, as found with a programme of work. In this method, a "business as usual" or do-nothing scenario is usually compared with one or more sets of alternate actions.

EXAMPLE 5: ASSESSING ALTERNATIVE PLANS USING SCENARIOS

A city council considered a programme of works to develop new cycle ways and improve public transport creating busways and bus stations along arterial roads. They wanted to understand the social impacts of these proposals in order to decide on preferred routes and an appropriate level of investment in facilities. The SIA helped with the selection of options for the cycling and bus routes, and with their designs and best locations.

The assessment considered a business as usual scenario of what would happen if a minimum investment was made to the existing network. The SIA also considered a scenario with a programme of actions, and then compared the results.

The two scenarios helped everyone consider issues such as access to transport for all social groups including different household incomes, ages, and different mobilities. The analysis included maps of the affected communities [and the proposed routes] using available social statistics such as census data. These maps helped decision makers understand how impacts differed across the population.

Social impacts included construction impacts such as interrupted access to businesses and residences. The longer-term impacts were also important, such as the likely effect on the form of the city and how people would connect socially within it. Improved access and connectivity of people was likely to affect the attractiveness of preferred locations for businesses, health clinics, schools, intensive housing, and green spaces.

MONITORING AND MANAGING SOCIAL IMPACTS

"Monitor impacts to manage them well"

Once a proposal is underway, the management of social change is assisted by information on what is actually happening - known as social monitoring.

An SIA should provide information about which impacts to monitor and manage based on:

- The likelihood of the impact occurring;
- The duration of the impact.
- The scale of the impact (the area covered, where the impact will be, the number of people affected and how).
- The assessed level of concern about the impact.
- The ability to manage the impact.

A Social Impact Management Plan (SIMP) is used for managing social impacts of large or significant social changes - in cases where there are multiple social impacts predicted and many people affected.

The SIMP should identify the social impacts that require monitoring with a strategy for doing this work including frequency of monitoring and responsibilities for doing it. Throughout it is vital to involve the affected people and communities in identifying and managing changes of concern to them (see section 5 for more information about SIA follow-up).

EXAMPLE 6: MANAGING SOCIAL IMPACTS OF A NEW HOUSING AREA FOR ENHANCED OUTCOMES

A greenfield housing development in a small, semi-urban settlement on the edge of the city will include a mix of residential housing types, including social housing, and most likely attract a range of families including young families and new migrants.

An SIA of the development anticipated a larger, more diverse and less cohesive community. Local social service providers raised issues about the limited size of the current commercial centre, and the ability of the local school and medical centre to expand. Existing residents raised issues about public transport, walkability, and the limited areas for outdoor recreation close by.

The SIA provided a Social Impact Management Plan in which the developer, government agencies, local council, service providers, and community groups used a community development approach to prepare strategies for increasing the provision of services and for building a community hub, with timing based on the results of social monitoring.

The council zoned land for some expansion of the commercial centre and planned a future library.

The developer added more walking routes, playgrounds and a public transport node to their subdivision plan.

An existing community newsletter and web page kept everyone informed.

With warning and support, the medical practice increased staff so, when the new housing increased the population, they were ready to cope based on available data.

3. ENGAGING WITH PEOPLE AND COMMUNITIES

In this section we identify approaches to SIA, from minimal participation of interested and affected parties through to empowerment of people and communities. We emphasise the importance of local knowledge and provide a list of methods used in SIA.

WHY PARTICIPATION?

People practising SIA should communicate and engage with interested and affected parties. This engagement is essential to a quality SIA and also benefits social cohesion.

A participatory approach to planning is clearly important for proposals organised at a local or community level. But it has been shown many times over that participation of affected people is an essential part of all planning processes and especially of large projects such as new infrastructure, and complex plans such as water management plans.

Approaches to public involvement in SIA vary considerably and are understood best along a spectrum, from minimal involvement of affected people to an SIA led and organised by them (handing them the power to decide on changes and to implement those decisions).

Table 4 (over page) shows a way of depicting this range of approaches.

Along the spectrum, SIA has evolved over time from an approach that is mostly about informing people, to greater collaboration.

Include affected people by seeking and listening to their input, and working with them from the start of a proposed change.

The spectrum begins with a top-down approach where affected people and communities are informed about a proposal and the SIA is done and defended in official hearings or the media. Affected people often see top-down approaches as pointless and they turn to opposing a proposal from the start.

People want greater transparency. “What is the actual plan here and how are our concerns going to be met?” (Commented a community leader regarding local opposition to a proposal they just heard about).

At the other end of the spectrum are SIA that empower affected people and communities at all stages of SIA and decision making. This approach is often found with proposals based in a community. These SIA may make use of professionals working alongside local experts to help identify and analyse impacts, and decide on desired community outcomes and how to achieve them.

Sometimes those designing a change say they are not able to provide information because they have not finished planning and their work is commercially or politically sensitive. This response misses the point that findings from the SIA can assist with planning and design, to achieve better outcomes for people affected. Also achieve better outcomes for the promonent because the proposal moves faster, with reduced costs from contested decisions.

	INFORM	CONSULT	INCLUDE	COLLABORATE	EMPOWER
DEFINING CHARACTERISTICS	Provide the public with information about a final proposal and its social implications. Limited disclosure of the alternatives examined. Limited disclosure of relevant technical information.	Seek input from interested and affected people about alternatives, a final proposal and the likely social effects. Full disclosure of all relevant technical information. Listen to and acknowledge input from the public, such as through meetings or submissions.	Work with affected people and communities jointly to consider alternatives and assess effects of a final proposal (incorporating local knowledge). Listen to proposals for management of social impacts.	Work jointly with, and resource, people and communities to develop a proposal from the start. Use SIA to work through alternatives and shape the final proposal and advice to decision makers.	Place planning and decision making in the hands of affected people throughout a process of change. Ensure there is sufficient capacity and resources to undertake this work from a community base.
TOOLS AND METHODS	Newsletters Website Public meeting	Submissions Stakeholder meetings	Workshops & working groups Local capacity building and administrative support to community groups	Collaborative planning processes openly sharing local and technical knowledge Facilitation resources	Committees with delegated powers Funding for local and community research, citizen science and facilitation.

Table 4: SIA and the spectrum of participation

EXAMPLE 7: A TALE OF COMMUNITY ENGAGEMENT FOR TWO SHOPPING CENTRE DEVELOPMENTS SHOWS THE BENEFITS OF GOOD ENGAGEMENT IN SIA

The first shopping centre is on a main road with a mix of residents in leafy streets and intensive housing nearby. Local businesses and shops served residents and through traffic.

The developer took a limited approach to community engagement. This effort was mainly to inform affected people (albeit as little as possible) in advance of applying for consent to build a shopping mall. The developer did not want to encourage any opposition from local residents and businesses.

The SIA was also limited in scope, focused on identifying the positive impacts of increased retail activity and employment. The proposal resulted in multiple arguments against the mall including the closed nature of the building and its car parks, no room for new residences, increased traffic and poor pedestrian links.

The mall received official consent but with some modifications to the external look of the building along with increased setbacks and landscaping, and traffic design with new bus stops. The new mall took custom from local shops and mostly attracted people from further away to work and shop there, with increased traffic.

The second development was also in a mixed area of businesses and residences with a main road.

The project team worked from the start with the SIA team to engage the local community and businesses about social impacts and the outcomes they wanted to achieve for the community from commercial development.

The affected community wanted positive social impacts and expected the shopping centre should complement current businesses and not displace them, and to provide jobs for locals.

As part of the design process, they sought buildings with positive impacts from active and attractive street frontages that included cafes and other hospitality, a new hotel and apartments above shops, along with enhanced walkability, public transport, and tree planting.

The developer worked with the local government and social service organisations to include them in the development and provide a mix of services in addition to retail activity. Urban design principles included health and safety, with associated lighting and landscaping. The design approach used collaborative meetings with a stakeholder working group, and an interactive web page. With consent they built a popular, people-focused mall well integrated with the rest of the shopping centre.

THE IMPORTANCE OF LOCAL AND INDIGENOUS KNOWLEDGE

Respect for local knowledge is an important part of any SIA that involves affected people and communities. Ways to learn about and understand local knowledge include: community and stakeholder workshops, focus groups, interviews with key stakeholders, residents and representatives of local organisations, local histories held in community libraries, the records of community groups, and internet sources, such as the websites of local councils and organisations.

In settings involving indigenous peoples, as in Aotearoa New Zealand, attention is paid to indigenous knowledge[8] and world views, which should be the case whenever indigenous people are part of or affected by a proposal.

Indigenous groups benefit from an empowered approach from the start, noting there will be nuances as to how to include indigenous people resident and not resident in a tribal area. Cultural Impact Assessments (CIAs) generally have a different purpose to SIA: they empower Treaty partners, so long as they are led by indigenous organisations and have sufficient resources (including time) to do them properly. They should be used in advance of decision making, so there is informed consent to any actions.[9]

CIAs examine the cultural significance, and uses, of places such as a river, estuary, or harbour to ensure any development there is consistent with iwi decision-making and desired outcomes. Science applied to these places, such as marine ecology, benefits from an indigenous world view and knowledge of natural life, cultural practices, and uses over time. SIA complements cultural assessments, with an understanding of social impacts, such as those on housing, employment, or health, for people affected of all cultural backgrounds, including indigenous groups within and outside a tribal area.

[8] Māori world view and mātauranga Māori
[9] Generally known as Free, Prior and Informed consent (FPIC).

EXAMPLE 8: HOW LOCAL KNOWLEDGE ASSISTED AN ASSESSMENT OF RIVER FLOWS AND WATER QUALITY

A regional government was responsible for setting minimum flows, nutrient limits, and ecological objectives for a river. An SIA helped them to develop their plan, alongside a CIA. During interviews, local farmers described how they used to swim and fish in the river for food, but how that had changed as the quality of the water had decreased with intensive farming and more water taken for irrigation. Recreational users described similar changes. A digger driver responsible for cleaning local drains that flow into the river described how he noticed there are fewer fish and crustaceans in the drains today.

A local historian had data about the river system and how uses had changed. He had walked the length of the river and mapped where he saw people fishing, boating, picnicking and swimming. He noted that swimmers had moved upstream to find cleaner water, and that use of the river for gathering food had decreased (e.g., for eels).

The CIA gave insights into the significance of the river for Māori, how it was used, and their sites of cultural significance. Families had used the river as a source of food and for ritual purposes, and these uses were undermined by decreasing ecosystem values and poor water quality. The assessment found a loss of indicator species, such as freshwater crayfish, and the status of the tribe was reduced by these declines, over a period when they had little input to river management.

A community workshop was held in a local hall. Participants formed into groups of 5-8 people, were given large sheets of paper, and asked to prepare a timeline of changes in farming practices, the river environment, and uses of the water for farming, recreation, and food gathering. This information confirmed the findings from interviews and helped put observed changes into an historical context.

METHODS OF ENGAGEMENT

"Engage all social groups"

Methods of engagement (listed below in Table 5) are used in SIA with two purposes in mind: First, to provide information about a proposal to interested and affected individuals, groups, and communities. Second, to gather information for assessing and developing a proposal.

A key feature of these methods is their dynamic nature with questions re-shaped as more information is collected. This approach differs from standard social research where the same question is asked of many people, and they receive no feedback while the research is underway.

When deciding on the methods to use, it is important to understand the community context and social settings for engagement identified in the social baseline - such as small scale (often rural) and large scale (often urban) settings.

Recognise that social groups have preferred ways of working, such as running meetings, organising and making decisions. Women, youth, vulnerable groups (such as the homeless), and newcomers often require thoughtful inclusion in planning and decisions making.

These ways of working require different attention to the methods used, and also different languages and media when communicating about a proposal.

Also, the SIA may reveal old antagonisms and extreme views that will require care in facilitation, so activities such as meetings are not disrupted, and the discussion flows in a productive and constructive way.

METHOD	FEATURES OF THE METHOD	TYPICAL USES
Semi-structured interviews	One-on-one sharing and collection of information, usually with a combination of set questions and topical discussions. Usually 1-2 hours, can be virtual.	Use for scoping, collecting baseline data and local knowledge, sharing information, and exploring issues in depth.
Focus groups	Small groups of up to eight people, selected to have a range of people or a group with similar backgrounds and interests. Requires skilled facilitation. Usually 2-3 hours.	Use for interviews, plus observing group interactions and exploring options and management actions. Allows discussion or debate to capture a range of views.
Workshops	Usually take place in a community hall or setting, either open format or invited. Can include small group discussions. Can range from 2 hours to a day in length. Requires skilled facilitation.	Use for sharing information and working through issues and options in depth. Useful for strategic thinking and planning exercises.
Charrettes and world cafes	Structured workshops with a range of views and backgrounds present. Can involve rounds of small group and whole group activities with synthesis between. Requires preparation and skilled facilitation. Can take several hours, or a day or more.	Can tackle complex problems and discussions, such as exploring a range of options, or developing an action plan. Can be conducted as a virtual meeting using specialist software.
Community meetings	Community members join for discussion at a local facility. Usually open participation, often chaired by a community leader, using a formal format.	Use for conveying information about a proposal and gaining an initial response. Often limited opportunity for discussion and easily diverted off topic.
Open house	Usually, a set display of maps and graphics showing a proposal and the results of technical assessments, with experts present. Participants interact with the material and experts. Requires good preparation and can be supported by a well-designed website.	Use to provide and discuss complex information in an informal way, with one-on-one discussions between experts and community members. Can allow scope for affected people to draw and add to maps and information, and write comments.

Table 5: A list of methods applied in conducting SIA

4. INFORMATION ON SOCIAL IMPACTS

In this section we discuss how to gather information on social impacts, and ways to bring different sources and types of information together from scoping to a full SIA report. We provide a typical report outline and discuss issues of quality and ethics for gathering information and engaging with people.

THINGS YOU CAN COUNT

"Use numbers for key trends"

Things you can count (or quantify) are an important source of information. Numbers provide important facts about the current situation and ways to understand changes over time (trends). They also help to predict potential social impacts that are then measured once change is underway.

There are often official sources such as the population census, employment surveys, business and sector surveys, taxation data, housing agencies and housing surveys, health statistics, transport agencies and user surveys, agricultural censuses and land uses, counts of overseas arrivals and surveys by tourism agencies, visitor information centres and trail counts. Most of this information is public but some might also be confidential, such as commercial or personal data.

Also get numbers for SIA from observations and simple counts, such as the number of houses in a settlement, the number of empty shops in a town centre, the number of fishers, or the people at a swimming spot.

The following list provides examples of information that is often reported with numbers:

- The total population, which is commonly broken down by sex, age, ethnicity, length of residence, religion, sexual orientation, disability, and other factors.
- Employment, often broken down by the sector of the employment, type of job, and skills required.
- Land uses, usually by type and area of particular land uses.
- Businesses, including types of business, and the size of the business by turnover or number of employees.
- Incomes, usually by personal and household incomes.
- Housing, including the type of housing, by types of home heating, level of ownership, price, and numbers of sales.
- Households by size, main demographic characteristics, and income.
- Crime, including types of crime by area.
- Transport, by the mode of transport used to get to work and access services (private vehicle, public transport, active).
- Recreation users by activity and site.
- Visitors, by origin, area visited, accommodation used, length of stay, and activities undertaken.
- Health (mental and physical health).

THINGS YOU CAN OBSERVE

Things you can observe (and usually describe in words or pictures) are also important sources of information for SIA, such as the way a community is organised and led, and the needs and wellbeing of people and the services that are available to meet those needs.

Often the things you can't count are the ones that matter the most when planning and making decisions. For example, you can count a school roll, but you have to describe the changing role of a school in a community.

Sources of descriptive facts include observations and site visits, interviews, walking and moving interviews with people from a place, meetings and workshops, field days, family and local histories, document searches, drawings and maps, museums, media, and social media.

Descriptive facts are used in all SIA, and examples include:

- Cultural information, including languages, environmental knowledge, and traditions.
- History and heritage, including historic buildings and sites, genealogy, taonga, and special places such as burial grounds and sacred sites.
- Homes, kinship, and family life, and how people live in houses, neighbourhoods, and settlements.
- Livelihoods including food gathering and growing and the informal economy.
- Environmental quality such as water supply and quality, ecological wellbeing, and outdoor recreation.
- Social needs, problems, and available services.
- Leadership, participation in decisions, equity, cohesion, and human rights.
- Quality of life, health, and wellbeing.
- Media commentary and social media.
- Views and perceptions of impacts and community change.

WEIGHING IT ALL UP

Most of the research for SIA is an ongoing investigation, so the process of analysis and weighing up information begins when scoping an SIA and continues from there. Findings are reported at any point that they are useful to the process of planning and decision making, and to the questions asked by the SIA.

Because it is usual to obtain data from multiple sources, including descriptive information and numbers, then all the sources are brought together to make a finding. This is called the process of triangulation - the analysis looks for more than one source and type of information and findings are apparent when the different sources point in the same direction. It is not a question of looking at the largest numbers or listening to the loudest voice.

Sometimes the finding of the SIA is not clear, or it raises an issue that requires more information and testing of the first result. Further analysis is also needed when the SIA identifies management actions that change an impact, and also when additional actions cause new impacts.

EXAMPLE 9: SIA INVESTIGATIONS AND THE PLANNING AND DESIGN OF A NEW HIGHWAY

Asked about what residents could expect to experience from a new highway through rural areas close to a city, a resident said in an interview they could experience a loss of access to facilities in a nearby settlement across the highway route, including the local school. They pointed out children crossed the route of the highway to the school on local roads and that families also used the school pool and hall after hours. This preliminary data indicated a possible social impact on community connections.

Investigating further, the SIA obtained from the school principal a map of the school catchment area, and data on how many children came by school bus and how many walked. Population demographics from a recent census added to the picture by showing where residents of school age lived. The issue of possible social severance was raised by residents and discussed at an early community meeting.

The initial finding of the SIA was that residents could experience some social severance from the highway. As a result, the highway planning team incorporated into their design a new walking and cycling routes and an additional highway crossing. When the new plan was provided to residents, they agreed with traffic modelling results that the negative social impact was reduced. The initial finding was revised from a negative to a positive social impact because community connections would be improved by the highway crossing points.

PRESENTING AND REPORTING AN SIA

Present information with care to make sure all sides of a story are covered in an SIA report and that there is no bias in the way results are presented. Social statistics, in particular, are easily slanted to a particular point of view. You can report "most" people have jobs, or 90 percent of people have jobs, or 10 percent are unemployed. Presentation depends on the point being made, the context, and the audience.

Poor SIA reports are often too long or detailed, lack focus on the key issues and fail to give a full sense of the social impacts and their significance.

A typical SIA report will include:

- A description of the project (or plan) proposal and who is making it.
- A description of the process of making any associated decisions, including the alternatives assessed, how the results of the SIA have been used so far, and how they will be used from this point onwards.
- The name of the party who requested and funded the SIA.
- How the SIA was conducted, who did the analysis, with lists of all sources used.
- A description of how interested and affected people and communities have participated in the SIA and in planning as a whole, with a sense of the voices that were heard.
- The scope of the SIA.
- A description of the affected people and communities and the existing social environment and any key trends without the proposed change.
- An assessment of particular social impacts if the change proceeds, the nature of the impact, who is impacted, where they are located, and who will experience any positive and negative impacts, with timeframes, recognising any likely winners and losers, and the implications of any inequity that results.
- A description of plans to avoid, reduce, manage, or remedy negative impacts, enhance positive ones, and monitor changes over time, with responsibilities for all proposed actions.
- A conclusion about the net impact of the proposal on social wellbeing over time.
- A summary of key findings from the SIA.

A summary table of impacts is a useful device and can include a scale showing the level of social impact (Table 6).

	VERY NEGATIVE	NEGATIVE	NEUTRAL	POSITIVE	VERY POSITIVE
Impact 1			✔		
Impact 2				✔	
Impact 3	✔				
Impact 4					✔
Impact 5					

Table 6: Table of social impacts, with an example indication of the level of impact (negative to positive). Use symbols or colours as preferred.

ETHICS AND QUALITY

"Practice ethical SIA"

There are a number of issues for ethical practice of SIA because it involves actively engaging with people, going to them and gathering information with them.

People who participate in an SIA must do so in an informed way, with their informal or formal agreement to take part. Some organisations will require formal ethics approval while others will expect the SIA practitioner to abide by standards, such as those advocated by the International Association of Impact Assessment (IAIA).

Make it clear who is funding an SIA and your role in planning a proposal. Give people realistic expectations about the result of their participation and the likelihood of changing aspects of a proposal or stopping an unpopular plan.

Keep input from individuals anonymous and confidential, such as personal views and experiences provided during research. In settings such as a community meeting, where speaking is out in the open, provide an option for confidentiality, for example provide for written comments, or make arrangements for one-on-one discussions afterwards if some participants prefer not to speak publically.

Confidentiality is important for participants to speak their mind, such as providing opinions that differ from a common view, or are culturally, politically, or commercially sensitive.

Maintain confidentiality wherever possible through written reports and documents, and in any form of feedback to the community, unless comments or opinions are already attributed in public or participants agree formally to have their views public.

Fully acknowledge sources and authorship of ideas and information already in the public domain, as in a written document or public media.

Ethical SIA practice emphasises quality research and analysis and does not cut corners in allowing participation, providing information, doing necessary research with more than one source of data, and reporting results in a balanced way.

Encourage involvement of affected people in liaison groups and as local experts. Support independent peer review, formal review and audit processes and public hearings. These all add to quality practice by ensuring the results of an SIA are tested, and contested if necessary.

5. THE SKILLS, KNOWLEDGE AND RESOURCES YOU NEED

An SIA requires a capable, knowledgeable, and experienced team or individual to do the work. It also requires sufficient time and financial resources to complete the steps outlined in these guidelines. Shortcuts run the risk of an unreliable SIA and poor outcomes for people and communities. A competent SIA team has:

- Understanding of how SIAs assess and manage social change.
- Knowledge of the formal requirements for any particular SIA.
- Knowledge of Treaty obligations, community-based development, and relevant partnerships and collaborations.
- Knowledge and understanding of SIAs and experiences gained from similar proposals.
- Knowledge of quantitative social data sources and uses, statistical methods, and how to use tables, graphs and maps.
- Knowledge of qualitative methods and social data, document research, and use of data from sources such as interviews, observations, and meetings.
- Ability to facilitate engagement with all interested and affected people, using methods such as interviews, meetings, workshops, or open houses.
- Understanding of how different impacts are inter-connected.
- Ability to consider and analyse data in an independent, balanced, and thoughtful way, and to employ methods for fairly weighing up and presenting data as useful information for affected people and decision makers.
- Knowledge of the ethical basis for designing and doing an SIA, ability to maintain confidentiality and anonymity, and an understanding of the assurances participants will need.
- Keep input from individuals anonymous and confidential, such as personal views and experiences provided during research. In settings such as a community meeting, where speaking is out in the open, provide an option for confidentiality, for example, provide for written comments or make arrangements for one-on-one discussions afterwards if some participants prefer not to speak publically.

6. SIA FOLLOW-UP

In this section, we discuss the importance of managing social impacts in order to achieve improved community outcomes based on a plan and informed by monitoring impacts as they happen, with management actions adjusted as necessary. This follow-up after change takes place can also inform future SIA by providing comparison cases.

PREPARING A PLAN FOR MONITORING AND MANAGING SOCIAL IMPACTS

For large developments likely to cause social impacts, such as a new highway or large housing development, a social impact management plan (or SIMP) is prepared as part of the SIA. Necessarily, these plans are adapted as new information comes available from social monitoring, and management actions cause additional or different impacts. For example, if the SIA finds an area has limited skilled workers, a SIMP might suggest plans to train local workers to gain new skills. Later, these skilled workers could move to other businesses or sectors and provide a boost to economic regeneration.

If, after all efforts are made to avoid, reduce, or mitigate an effect, the SIA finds that there are residual impacts on individuals or groups of people, then some remedy is considered. For individuals this remedy may involve a negotiated financial settlement, especially when the impact is on homes and livelihoods. If the effect is at a community level, then a remedy is applied for that community.

For example, when a community hosts an activity such as a highway, mine, factory, or waste management facility, they could expect local benefits for employment and economic activity, but residual negative effects might remain despite mitigations, such as noise or heavy traffic affecting lifestyles, health, and safety. The SIA can help to justify and establish a remedy for these remaining negative impacts on the community, such as applying funds to community projects.

It is important to organise into a SIMP all of the strategies and actions to reduce, mitigate, or remedy negative social impacts. In developing a SIMP to cover these actions an SIA works with the affected communities from the start. This will include identifying and working with local leaders and organisations including the local council, tribes, community development organisations, and support networks of local volunteers. When necessary, a liaison group can bring community representatives and key organisations together for the specific purpose of guiding a SIMP and implementing it.

Monitoring is an essential part of any management plan, so actions of mitigation and management are well informed and adjusted as necessary. Monitoring of social impacts also requires ongoing community input as used for the initial SIA work.

THE USE OF SIA FOLLOW-UP IN FUTURE ASSESSMENTS

It is important to consider how one SIA feeds into later ones. This circling of effort is why the SIA process is often depicted as a circle - refer back to Figure 2. The feedback loop includes any monitoring of social impacts and other follow-up to an SIA, especially audits and evaluations of community outcomes.

These both draw on social impact monitoring and are important sources of comparison cases used to help manage social impacts, as well as to scope and predict impacts of a new proposal. So too is any social impact research, including research done for academic purposes such as student research.

EXAMPLE 10: AVOID, REDUCE, MANAGE, AND REMEDY THE SOCIAL IMPACTS OF A WIND FARM

A new wind farm was proposed for a windy range of hills close to a small city. Several other windfarms were already built on these hills. Over time the attitudes of residents had changed from wide acceptance of these facilities to increasing concern about the impacts of additional wind farms in the area.

Pastoral farming was the predominant land use and farmers hosting generating pylons accepted the impacts of these machines because they could farm around them and gain income from royalties. When they had concerns about noise and visual impacts, they were able to negotiate where pylons were placed to avoid or reduce their impacts. The SIA found people living close to pylons (within around 2 km) were most likely to experience direct impacts on their ability to enjoy their properties and the rural ambience.

Some of these impacts were avoided or reduced by locating fewer turbines in their vicinity and moving others to locations sheltered by the broken, hilly landscape, while still retaining a viable level of power generation. Noise was managed by regular monitoring of noise levels, regular maintenance of the turbines, and turning them off in some wind conditions.

Further afield, the people in the city were well aware of the windfarms and many supported them for their sustainable power production and the security of power supply from a nearby source. But there was increasing concern about impacts on the landscape and recreational values of the hills. Remedy was agreed on for these unavoidable impacts experienced at a community level. The wind farm company set up a community fund based on income from generation, to provide ongoing income to community groups, facilities, and projects.

EXAMPLE 11: FOLLOW-UP SIA AND THE SOCIAL IMPACTS OF IRRIGATION

An example of a follow-up SIA, used in the planning or expansion of new projects, is one done by an existing irrigation company to understand the social impacts of their irrigation scheme. They wanted to inform farmers, communities, and investors considering additional irrigation in their area and nearby. This information also helped another SIA to predict the social impacts of a new community irrigation proposal at a different site.

Examples of social impacts identified in this follow-up SIA were increases in the numbers of workers on farms and in the surrounding area and settlements that serviced the area. Many of these workers brought families with them. There was an increasing diversity of the rural population as new people moved into farmwork, including younger age groups and migrant workers.

The follow-up SIA showed that there was an increased demand for housing for these new people, including rentals for short-term workers. It also showed newcomers to the area needed help to settle in and join church groups, sports clubs, and schools, where their energy and new ideas made a strong contribution. Project income helped community leaders to hire community workers and manage the social changes in a positive way. Newcomers were well integrated in the community and there was less tension between newcomers and old timers. All good lessons for other projects.

SIA FOR BUILDING THE RESILIENCE OF PEOPLE AND COMMUNITIES

SIA assists people and communities to build up their resilience so they can adapt to changes and develop positive outcomes. Robust ecosystems and robust communities together help to provide a buffer against future changes including planned and unplanned changes. This includes resilience in the face of human-induced changes, such as adapting to and reducing the impacts of climate changes, and efforts to adapt to turning around losses of biodiversity.

The purpose of SIA is to increase social wellbeing and sustainable outcomes. There are a number of ways that desirable human outcomes are measured. These include the Sustainable Development Goals (SDGs) developed by the United Nations as well as national , tribal and regional measures.

COMMUNITY-LED CHANGE

In a community-led approach to SIA, all participants work together on a proposal and produce knowledge about the impacts in a collaborative and strategic way.

In Table 7 (page 38), we align the SIA steps and community processes, engagement methods, and analysis of impacts from the early stages of planning through to taking actions and managing change. Different people can join this sort of community-led approach planning and managing change: community leaders, organisations and groups, iwi, councils, agency personnel, and professional social scientists.

CONCLUSION

These guidelines take readers through a practical approach to SIA for people and organisations proposing changes that could cause social impacts.

In particular, the guidelines can assist those organising local and community-led strategies and initiatives for social, economic, and environmental regeneration.

They can also help communities respond to and manage changes that developers or agencies bring to them so they get the best possible outcomes through a community-led approach to managing change.

SIA PROCESS	COMMUNITY PROCESS	ENGAGEMENT AND ANALYSIS
Scoping	Community group formed to lead a community initiative	Engage with key stakeholders; initial meetings/hui
Social baseline	Understand the existing position, needs, and main trends	Assess and discuss issues and options; workshops/hui
Assess alternatives	Consider issues and potential strategies	Surveys and data gathering by local groups, agencies, iwi; engage with affected people; collate local knowledge and expertise
Assess proposed action/s	Strategic plan of actions with objectives, tasks, timing, and resources	Workshops and meetings/hui on 'with and without' scenarios and impact predictions
DECISION		
Monitor and evaluate	Mitigate and manage change Evaluate community outcomes	Monitor impacts and evaluate outcomes including official data and community experiences

CO-PRODUCTION OF KNOWLEDGE

Table 7: SIA for community change initiatives and programme development

ANNEX 1: GUIDELINES/RESOURCES

INTERNATIONAL GUIDELINES

International Association for Impact Assessment SIA Guidelines
Guidance for assessing and managing the social impacts of projects.
https://www.iaia.org/uploads/pdf/SIA_Guidance_Document_IAIA.pdf

The World Bank Environmental and Social Framework.
The Bank takes an integrated approach to social and environmental safeguards and their framework is an important resource.
https://documents1.worldbank.org/curated/en/383011492423734099/pdf/The-World-Bank-Environmental-and-Social-Framework.pdf

The NSW Social Impact Assessment Guideline for State Significant Projects (2021).

Every state-significant project in NSW is subject to a proportionate SIA. This guideline aims to assist project proposers, affected communities, and state government work through preparation of an SIA.

https://shared-drupal-s3fs.s3.ap-southeast-2.amazonaws.com/master-test/fapub_pdf/SIA+Guideline+20210622v6_FINAL.pdf

NZ GUIDELINES

New Zealand Transport Agency
Guide to Assessing Social Impacts for State Highway projects.
https://www.nzta.govt.nz/resources/guide-to-assessing-social-impacts-for-state-highway-projects/

Public Health Advisory Committee
A guide to health impact assessment as a policy tool for New Zealand
https://www.moh.govt.nz/NoteBook/nbbooks.nsf/0/D540E1D80F7DB72CCC2578670072F996/$file/guidetohia.pdf

CENTRES OF EXCELLENCE

The following organisations provide centres of excellence in the practice of SIA internationally and in Aotearoa New Zealand.

The International Association for Impact Assessment
The premium international body of people doing different types of impact assessment, including SIA. Provides guidelines on SIA, lists of key citations, and other resources
www.iaia.org

The New Zealand Association for Impact Assessment
The leading organisation of people practicing impact assessment in Aotearoa New Zealand including SIA.
www.nzaia.org.nz

The Centre for Social Responsibility in Mining, University of Queensland
Focused on extractive industries, this centre provides a focus for work relating to indigenous peoples, corporate social responsibility, and SIA more generally.
https://smi.uq.edu.au/csrm

ANNEX 2: KEY CITATIONS

Key references that will help readers develop their knowledge of SIA

Andre, P., Enserink, B., Connor, D. & Croal, P. (2006). *Public Participation Best Practice Principles*. Special Publication Series No. 4. USA: International Association for Impact Assessment.

Arce-Gomez, A., Donovan, J. D. and Bedggood, R. E. (2015). Social impact assessments: Developing a consolidated conceptual framework. *Environmental Impact Assessment Review*, 50, 85-94.

Becker, H. & Vanclay, F. (Eds) (2003). Handbook of Social Impact Assessment, Conceptual and Methodological Advances, Cheltenham: Edward Elgar.

Burdge, R. and colleagues (2004). *The concepts, process and methods of social impact assessment*. Social Ecology Press

Esteves, A., Franks D. and Vanclay, F. (2012). Social impact assessment: the state of the art. *Impact Assessment and Project Appraisal*, 30 (1), 34-42.

Holm, D., Ritchie, L., Snyman, K. and Sunderland, C. (2013). Social impact management: a review of current practice in Queensland, Australia. *Impact Assessment and Project Appraisal*, 32(3), 214-219.

New South Wales Government (2021). The NSW Social Impact Assessment Guideline for State Significant Projects. NSW Department of Planning, Industry and Environment. Sydney.

Parsons, R. (2020). Forces for change in social impact assessment. *Impact Assessment and Project Appraisal*, 38(4), 278-286.

Parsons, R., Everingham, J. A. and Kemp, D. (2019). Developing social impact assessment guidelines in a pre-existing policy context. *Impact Assessment and Project Appraisal*, 37(2), 114-123.

Slootweg, R., Vanclay, F. and van Schooten, M. (2001). Function evaluation as a framework for the integration of social and environmental impact assessment. *Impact Assessment & Project Appraisal* 19(1), 19-28.

Smyth, E. and Vanclay, F. (2017). The social framework for projects: a conceptual but practical model to assist in assessing, planning and managing the social impacts of projects. *Impact Assessment and Project Appraisal*, 35(1), 65-80.

Taylor, C. N., Goodrich, C. G. and Bryan, C. H. (2004). Social Assessment: Theory, Process and Techniques (Third Edition). Social Ecology Press. Middleton, Wisconsin:

Taylor, C. N., Mackay, M. and Perkins, H. C. (2021). Social impact assessment and (realist) evaluation: meeting of the methods, *Impact Assessment and Project Appraisal*

Vanclay, F., Baines J. and Taylor C. N. (2013). Principles for ethical research involving humans: ethical professional practice in impact assessment Part 1. *Impact Assessment and Project Appraisal*, 32(4), 243-253.

Vanclay, F. and Esteves, A.M. (eds). 2011. *New Directions in Social Impact Assessment: Conceptual and Methodological Advances*. Cheltenham (UK): Edward Elgar.

Vanclay, F., Esteves, A. M. and Franks, D. M. (2015). *Social Impact Assessment: Guidance for assessing and managing the social impacts of projects*. Fargo, USA: International Association for Impact Assessment. Fargo USA.

ANNEX 3: OTHER KEY REFERENCES

Includes references by the authors used to prepare these guidelines in addition to Annexes 1 and 2

Baines, J. and Taylor, N. (2021). 'Green' is good, but is more 'green' always better? Wind farm development and cumulative social impact assessment. Chapter 3 in Jill A.E. Blakely and Daniel M. Franks (Eds), *Handbook of Cumulative Impact Assessment*. Cheltenham: Edward Elgar.

Baines, J., McClintock, W., Taylor, C. N. & Buckenham, B. (2003). Using local knowledge. Chapter 3 in H. Becker and F. Vanclay (Eds), *Handbook of Social Impact Assessment, Conceptual and Methodological Advances*. Cheltenham: Edward Elgar.

Conland, J. (Ed.). (1985). Social impact assessment in New Zealand - a practical approach. Town and Country Planning Directorate, Ministry of Works and Development. Wellington.

Mackay, M. & Taylor, C. N. (2020). *Understanding the Social Impacts of Freshwater Reform: A Review of Six Limit Setting Social Impact Assessments*. AgResearch Report RE450/2020/005 for New Zealand Ministry for the Environment. Christchurch, New Zealand: AgResearch Lincoln Research Centre

Mackay, M., Taylor, N. & Perkins, H C. (2018). Planning for regeneration in the town of Oamaru. *Lincoln Planning Review*, 9(1-2), 20-32.

Perkins, H. C., Mackay, M., Levy, D., Campbell, M., Taylor, N., Hills, R. and Johnston, K. (2019). Revealing regional regeneration projects in three small towns in Aotearoa–New Zealand. *New Zealand Geographer*, 75(3), 140-151.

Taylor, C. N., Russell, J. C. & Russell, K. J. (2020). A strategic social impact assessment for Predator-Free Rakiura, New Zealand, with a human-ecological approach. *Socio-Ecological Practice Research*, 2, 161-174.

Taylor, N., McCall, R. & Taylor, P. K. (2009). Going the extra mile ... meeting social needs in Western Southland. Report on the Western Southland Rural Services Research Project. Invercargill: Presbyterian Support Services.

Taylor, N., Fitzgerald, G., Perkins, H. & Buckenham, B. (2007). *Central Plains Water Enhancement Scheme Social Impact Assessment*. Christchurch: Taylor Baines, in association with Fitzgerald Applied Sociology and People & Places, for the Central Plains Water Trust.

Taylor, C. N. and Mackay, M. (2016). Social Impact Assessment in New Zealand: Legacy and Change. *New Zealand Sociology*, 31(3), 230-246.

Taylor, C. N. and Mackay, M. (2016). Practice issues for integrating strategic social assessment into the setting of environmental limits: insights from Canterbury, New Zealand. *Impact Assessment and Project Appraisal*, 34(2), 110-116.

Taylor, C. N., Mackay, M. and Perkins, H. C. (2021) Social impact assessment and (realist) evaluation: meeting of the methods. *Impact Assessment and Project Appraisal*, 39(6):450-462.

> “SIA provides guidance in managing the consequences of social change arising from proposed or current policy, actions or projects.”

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