

What is a reasonable oiled wildlife response?

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Abstract

The term “reasonableness” is key when it comes to the assessment of a wildlife response claim by a financial compensation mechanism. Although poorly defined, it is strongly related to rational decision-making in the course of an incident: reasonableness expects the response managers to aim for achievable objectives in relation to the cost-effectiveness of alternative response methods under the given circumstances. This paper investigates the different options for mounting an oiled wildlife response and highlights the pros and cons of different approaches in dealing with threatened or affected wildlife under various scenarios, including responses in remote areas or under extreme conditions.

Introduction

The history of oil spill responses since the Torrey Canyon in 1969 includes a large number of incidents where an attempt was made to respond to oiled wildlife, often with varying degrees of success. The notion of oiled wildlife response first began as an attempt by concerned individuals to save the lives of animals impacted by oil spills, mainly birds, in their communities. During these early beginnings, these efforts were not part of the organised cleanup effort but rather a movement that arose organically out of a general public sentiment that trying to save animals is simply the right thing to do. These individuals used the resources at hand – in many instances in their homes or garages – to attempt to remove the oil and return the animals to the environment. They had no expectation of compensation for their time or expenses and little understanding of the effectiveness of their efforts. However, the attempt alone provided an outlet for members of the local community to take action and to feel some sense of empowerment at a time that can otherwise engender feelings of anger and hopelessness in the local community and in the public-at-large.

As responses have become better documented, especially from the mid-nineties onwards, the trend indicates that wildlife responses are becoming better coordinated and carried out. Oiled wildlife response has now developed into a multi-disciplinary (semi) professional endeavour, which relies on a more scientific approach to wildlife response measures and a better understanding of the effects of oil on wildlife. There is a growing body of knowledge and experience in this field and a growing interest in developing best practice guidelines. The topic is also gaining weight in national oil spill contingency planning and international mutual aid programmes of a number of Regional Agreements. As oiled wildlife response becomes more and more integrated into the overall oil spill response, there will continue to be a range of opinions in different parts of the world and amongst different stakeholders on what constitutes an appropriate oiled wildlife response. This in turn will bring about an increased expectation that the associated costs will be compensated similarly to the costs of other response efforts. The term reasonableness has been used in other areas of the response to help determine if the measures used can be justified as being eligible for compensation. This presentation will attempt to apply this “reasonableness” to oiled wildlife response and to initiate a discussion on evaluating the appropriateness of different wildlife response methods, including anticipated costs, in unique situations.

Defining reasonableness

The term ‘reasonableness’ has become well known in the oil spill response community as it is used in relation to financial compensation of oil spill damage, including costs of response activities, restoration or economic loss. The Collins English Dictionary (2009) defines ‘reasonable’ as “not extreme or excessive, moderate, fair, capable of rational behaviour or decision, a relative term, applies to that which is appropriate for a particular situation” and suggests that reasonableness is therefore a subjective assessment, depending on your point of view. In the reality of an oil spill response situation this could, and often does, lead to discussions between technical experts involved in the decision making, and sometimes requires independent advice and judgement.

The leading document that provides guidance as to which costs can be considered for compensation is the IOPC Funds Claims Manual (IOPC Fund, 2008), which is used for claim management in the context of the IOPC Funds and Civil Liability Conventions, but also by P&I Clubs for similar purposes. Since the 2004 edition of the Manual, oiled wildlife response has been included (see Box 1 below).

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| 1.4.6 | “Compensation is also payable for reasonable costs associated with the capture, cleaning and rehabilitation of wildlife, in particular birds, mammals and reptiles.” |
| 3.1.4 | “As a consequence of concerns for animal welfare, efforts are often made to clean contaminated animals, particularly oiled birds, mammals and reptiles. The capture, cleaning and rehabilitation of oiled wildlife requires trained personnel and the work is normally carried out by special interest groups, often with the assistance of volunteers who establish cleaning stations close to the spill location. Cleaning is difficult and slow and causes the animals further distress, and should only be undertaken if there is a reasonable chance of the animals surviving the process. Claims for reasonable costs associated with the provision of local reception facilities appropriate to the scale of the problem, materials, medication and food are normally compensable, as are reasonable food and accommodation costs of volunteers. If several special interest groups undertake cleaning and rehabilitation activities these should be properly co-ordinated to avoid duplication of effort. Deductions will be made for funds raised from the public for the specific purpose of maintaining the field operations for a specific incident.” |

Box 1: Extracts regarding oiled wildlife response from the IOPC Claims Fund Manual (IOPC, 2008).

Although “reasonable” is a key word throughout the IOPC Claims Manual (it occurs 43 times), it is not defined there. The claims submitted by affected parties are justified or rejected on the basis of an objective technical evaluation of the situation at the time of the event (costs of response activities) or before the spill (restoration, economic loss). Moller (1997) states that in the context of the Civil Liability Conventions and the Fund Conventions, primary technical criteria are used to judge whether a claim is admissible and to impose limits on the type and extent of oil spill response activity that can be considered reasonable in the context of compensation payable under the Conventions. Moller defines that the scale of the response measures should be in proportion to the size of the spill, the expected level of success, and the ability to direct and control operations effectively. These three criteria relating to reasonableness are examined in the sections below, using considerations specific to wildlife response. First it will be explored which response measures can actually be considered in an oiled wildlife response and to which expected effect (or success). Then the questions of scalability will be discussed.

Wildlife response measures

Which measures for wildlife response could be considered following an oil spill incident?

In the context of the IOPC Fund manual one could argue that the aim of an oiled wildlife response operation should be to prevent or minimise pollution damage to wild animals and their populations. Clearly this should be interpreted more broadly than rehabilitation efforts alone, which already was demonstrated in IPIECA (2004). Oiled wildlife response today is considered to include a range of measures for active intervention. Generally, these fall into five categories as outlined below:

a) Monitor and assess impact

Irrespective of which measures are employed, it is essential that sufficient monitoring and documentation of the potential and actual impacts of oil on wildlife always takes place. An oil spill at sea may or may not impact individual animals. If it does, a number of animals may eventually arrive ashore. These animals are a source of information that can be used to assess the overall impact of the spill, but only when they are systematically collected and kept for scientific analysis. This analysis includes species determination, counting, sexing, age assessment, and biometric analysis. Also the cause of death can be determined via necropsy (post-mortem examination) if required. An assessment of the total impact of the spill on populations follows by comparing the measured data with relative search and collection effort and an assessment of the proportion of animals that washed ashore in relation to the total. The latter can be estimated, e.g. via drift block experiments. A scientifically sound impact assessment should always be preferred over statements that the media tend to use, which normally exaggerate to dramatic effect without any underlying analysis.

b) Refrain from action

In most cases no action would be an appropriate response if taking action would significantly risk human health and safety (e.g. because of bad weather or sea conditions, extreme or remote areas, dangerous areas, or dangerous and/or poisonous animals). Rather than a passive approach, this option must be considered as something that might need active implementation, for instance in a situation where responders or the public must be actively discouraged from going out and rescuing animals. This option should also be preferred when there are no obvious wildlife impacts, or when impacts are visible in areas where disturbance caused by a response would do more harm than good (e.g. only a few oiled animals in a breeding colony, or animals in a sensitive biotope such as salt marsh). In all these cases a strong central decision making and coordinating system for wildlife response is needed, which actively communicates with wildlife responders, the media and the public, and implements the decisions taken via the chain of command, and civil protection, police and fire brigade services as appropriate.

c) Prevent oiling of wildlife

This is the primary strategy which should be applied when and where possible. If viable, preventing wildlife impact is not only the best solution for the animals but it can also result in considerable economic benefit. Preventing the oiling of animals basically follows two strategies: keeping the oil away from the animals, or keeping the animals away from the oil. The integration of oiled wildlife response in the overall oil spill response allows active use of wildlife information to direct at sea combat activities (dispersant spraying, containment and recovery) to avoid oil reaching areas with vulnerable wildlife. If combat fails, booms may also help to keep the oil out of vulnerable areas. Knowing where vulnerable wildlife is found (seasonally and spatially) is a key asset to make prevention effective. Too often it is assumed that oil at sea is not harmful to wildlife, as oil spill responders are often unaware of high seabird densities in offshore waters. Preparedness includes sensitivity mapping, also of offshore areas, and the use of trained biologists in real-time monitoring, by putting them on aircraft which track the behaviour and movement of oil. As a last resort for preventing animals from becoming oiled, specific techniques can be applied to try to move animals away from areas that are expected to become oiled. These techniques are known as hazing/deterrence, and are well described, e.g. in Gorenzel and Salmon (2008). Another method is known as pre-emptive capture, which means that unoiled wild animals are captured from threatened areas and relocated to clean areas, if needed after a short period of captivity. The collection and relocation of turtle eggs from oil threatened beaches also falls into this category.

d) Collection and rehabilitation

Collection of live oiled animals in order to rehabilitate and release them can be a highly effective option, and the most concrete sign for the local community that response and restoration are taking place. However, rehabilitation is a technically vulnerable undertaking. Keeping oiled animals alive and reversing the effects of their oiling in such a way that they regain their survivability as if they had never been oiled (see Box 2), is a challenging activity. It can be done, but trained expertise needs to be available locally or be supplemented from international resources, as well as proven methodologies and specialised equipment. If properly planned for and the windows of opportunity are well used, rehabilitation can be a powerful tool in mitigating the effects of an oil spill.

An attempt to rehabilitate a stricken animal is only to be valued if there is a reasonable chance that the animal's survivability will rival that of unoiled animals, which is also noted in the IOPC Claims Fund Manual as a criteria for undertaking rehabilitation. Unfortunately this survival can never be fully assured even under the most ideal circumstances, as it is hard to systematically collect data on the wellbeing of animals after their release. What can be assured is the expertise of those who undertake rehabilitation efforts and scientific justification of the rehabilitation methodology that they use. This means that the best results can only be expected from trained and experienced personnel. Apart from methodologies applied by less experienced wildlife responders, it has been demonstrated that a lack of planning and support (resources) for wildlife operations can also lead to a poor result, despite highly qualified expertise and proven methodology being applied (Wolfaardt, 2008). The few studies that follow oil-rehabilitated animals after their release do demonstrate their survival, which appears to be longer than one would expect under the assumption that rehabilitation does not make any difference (Warnock, 2009).

Box 2: Some remarks on the post release survival of oil-rehabilitated animals

e) Euthanasia

Euthanasia by definition is a tool to relieve pain and end animal suffering. It should always be available as a response option, even when rehabilitation is the principle objective as it is unlikely that every oiled animal collected will react positively to its treatment and the care provided. Although many methods can be thought of to kill a wild animal, the general expectation from the public would be that methods are humane. Having said that, one should always be aware of the fact that the attitude regarding euthanasia of wild animals, and methods that are considered acceptable, varies widely both culturally and individually. Therefore, in considering this, it is very important to consider how the local community, the national population of the affected country and even the global public audience values the resources available, particularly when they are of conservation concern.

Now that the response measures have been defined and it has been explained how these measures could contribute to a success of an intervention, it becomes important to explore how decision makers who are in charge of directing the response can optimise the effect of their planned response efforts. They would do this by allocating resources (money, expertise, manpower, equipment, facilities, time) to any of the measures a-e where a window of opportunity is identified. The eventual success of a response will depend on which objectives have been defined, if some critical factors are in place and to which extent certain critical resources can be scaled up to match the size of the incident, especially in the more challenging scenarios.

Selecting response objectives

In choosing which combination of measures should best be taken, it is important that sound objectives are defined to guide decision making. To be considered reasonable, these objectives should be directly related to the main objective of the response, i.e. prevent or minimise pollution damage to wild animals and their populations. For objectives to be sound, they should be quantifiable, so setting measurable benchmarks for success. Some examples of measurable objectives are, (in no particular order):

- To systematically collect all corpses of animals that arrive on the shoreline for impact assessment
- To collect every oiled animal that comes ashore alive for rehabilitation and subsequent release
- To humanely euthanise all oiled animals arriving ashore
- To rehabilitate oiled animals that come ashore but use euthanasia as a management tool to ensure that the available resources do not become overwhelmed
- To keep at least 50% of a local population of an endangered species from becoming oiled.

It is clear from these examples that the way in which objectives are formulated, has major implications for the type and extent of the resources that are needed in order to be successful. Therefore ideally the objectives for an oiled wildlife response plan should be proposed, discussed, agreed and laid out in a pre-existing wildlife response plan, whether for a facility, an island, a country or a cross-border region, and agreed on by the major stakeholders. The feasibility of the selected objectives must then be explored and tested by running a set of realistic scenarios (e.g. winter vs. summer, large vs. small number of casualties, remote vs. less remote spill location) building on experiences of past responses. In this way it can be seen if the objectives are achievable in relation to the response means and resources available under these scenarios. Doing these tests well before an incident actually happens will offer the opportunity to pre-identify or create the resources needed for what stakeholders believe should be done.

A well-developed response plan will provide a wildlife response manager (together with key stakeholders) with the right information to quickly put in place an incident-specific action plan, detailing the response measures to be used and reflecting the philosophy and selected objectives in the response plan. Having a well-defined action plan under the control of a wildlife branch, which is in turn well integrated into the overall oil spill command, also keeps management oversight of the wildlife response and allows for better cost control. Under less ideal circumstances, a pre-defined response plan with realistic objectives will not be available for the individual who has been assigned to lead the wildlife response. Under those circumstances it is unlikely that, without external assistance from wildlife response experts, a cost-effective response in the interest of the affected animals can be set up.

Critical factors

Critical factors are defined here as those factors which determine the potential effectiveness (or feasibility) of a wildlife response activity. If they are present there is a good chance that the activity might

work. If not present, success will be unlikely. There is a wide range of critical factors, many of which are inherently variable. Some of the more fixed factors at the time of the spill include the locally existing resources, level of preparedness and existing plans (including stakeholder involvement), and the availability of regional or international resources. As with other areas of spill response, resources needed for wildlife response include trained and experienced personnel, manpower (e.g. volunteers), technical equipment and appropriate facilities. Other factors may be related to infrastructure such as roads (transportation), harbours, airports, cities (volunteers, supplies, technicians, accommodation, catering), or buildings of opportunity with key utilities (space, water, water pressure, electricity).

Hugely important as a critical factor is the legal framework that is at play behind the decision making process. In some countries legislation prescribes which treatment should be provided to animals in distress (e.g. from an oil spill), leaving no room for further speculation. Legislation also should be looked at in relation to providing licences for responders (both local and invited experts from other countries) to touch, collect and/or treat wild animals, especially if they are of conservation interest. A number of human factors and considerations also come into play which need to be included in decision-making as intrinsically as possible. These include stakeholder expectations (incorporating the general public, indigenous peoples, environmental groups), media interest and political pressures, all of which connect with and feed off each other. Consideration of conservation values, humane and ethical values, and economic costs and benefits must all be incorporated in developing objectives and they may be inextricably intertwined. For example, the existence of a species of high conservation value such as a particular species of penguin may be a significant draw for tourist dollars in a certain country, so effectively “doubling” the value of a certain strategy to protect them. Another example of this ‘intertwining’ is whether the cleaning of beaches in a wealthy suburb is prioritised over cleaning wildlife habitat. In this case the delay in being able to release wildlife into clean areas could mean that animals are kept longer in care, thus increasing the cost and potentially decreasing the chances of survival for animals in captivity.

Scalability of resources

Apart from assessing the presence and availability of the critical factors for a certain approach, it is also important to know to which extent critical factors are scalable. In case of a large incident, some resources will need to be scaled up in order to deal with the challenges. For example, if rehabilitation is to be employed as the response strategy to deal with live animals, one needs to assess how many of the animals that wash ashore alive could be rescued, rehabilitated and released based on the available resources. If the aim is to rescue all animals *in principle*, a thorough assessment is needed of how many animals might come ashore in a worst case scenario. A realistic assessment might lead to the conclusion that one or more critical factors will probably fail at such a large scale. In such a case it is essential that the scale of the response is given a numerical maximum (e.g. “1500 birds can be rehabilitated”), meaning that euthanasia is used as a management tool to deal with a surplus of animals that may arrive, to avoid overwhelming the existing resources. Making these essential assessments on scalability as early as possible by a sensible but decisive incident management system that is trusted and supported by stakeholder interest will avoid disappointments connected to failure and, at the same time, contribute to cost-effectiveness.

Challenging scenarios

In difficult cases, such as a very remote response, severe weather or climate conditions, or a situation where local expertise and resources are lacking, even with relatively small numbers of oiled animals it may not be feasible to rehabilitate due to lack of infrastructure, lack of available trained personnel or unsafe working conditions. This could therefore create situations where for instance rehabilitation as a response option may not be a viable option. In this case, if all other alternatives have been explored, the most humane decision may be to euthanise all oiled animals as soon as possible using locally acceptable methods. A large-scale euthanasia operation, although not an ideal situation and usually a last-resort, should not necessarily be considered as unreasonable, or as a failure, as it could be the most appropriate strategy from an animal welfare point of view. Nevertheless, it should not be presumed that euthanasia is an easy option as it must still be planned for – it cannot be simply be turned over to a third party, such as a hunting group, without proper supervision and integration into the command structure. A large-scale euthanasia operation must be explained to the public, ideally with the support of leading conservation or wildlife rescue NGOs.

Therefore in challenging scenarios, it will also be necessary to define a limit of what is practically feasible according to an assessment of scalable resources as outlined above, and then to select the best response measures around those limits as part of an incident-specific action plan, taking into account the expectations with public and stakeholders. This process helps to demonstrate to identified stakeholders, including the general public, that decision-making was based on sound and reasonable judgement, taking into account the best information available at the time.

Assessing reasonableness

It follows that an assessment of reasonableness is normally dependent on the following criteria:

1. The level of local preparedness in place for dealing with oiled wildlife, including the availability of an agreed, exercised and integrated wildlife response plan, trained personnel, manpower, equipment and facilities.
2. The international wildlife response resources available ad-hoc to compensate for any lack of preparedness, that can be mobilised, coordinated and integrated into the local response.
3. Costs anticipated and an evaluation of cost-efficiency, in relation to the objectives that have been selected and agreed by the most important stakeholders.
4. The actual challenges of a given incident in relation to a sound assessment of the various critical factors.
5. The legal framework in terms of oil spill response and oiled wildlife response (e.g. wildlife handling licences, governmental agency input and oversight, species/habitat conservation).

What is classed as “reasonable” may be different in each circumstance but the amount of effort that has gone into preparedness (including the exploration of realistic scenarios) will be reflected in the ability to quickly identify existing resources, broadly consider potential objectives and translate them into an array of response measures to be implemented. This approach will optimise the chances of success whatever the chosen course of action may be. Even when an existing wildlife response plan is in place, an on the spot assessment is still important in order to get the right balance between what should be done and what can be done using all possible resources, taking local conditions and circumstances and cost considerations into account. Getting this balance right, and being able to explain the decision-making behind it, requires four types of expertise:

- i. Experienced wildlife responder who can assess the technical potential of measures that are considered.
- ii. Operational spill manager or on-scene commander (or equivalent), who can weigh priorities in relation to other parts of response.
- iii. An expert in financial compensation (e.g. ITOPF, IOPC, P&I club representative)
- iv. Local and/or national resource and conservation agencies, to ensure the integration of legal requirements in the response.

To get the best out of this decision-making ‘committee’, it is important that all parties have a basic understanding of and respect for each other’s expertise and that the decision-making process is implemented swiftly, so as not to miss the limited window of opportunity for reversing the effects of oiling on wildlife.

Conclusion

Five key criteria have been defined for making an assessment of reasonableness: the level of preparedness, international resources available, cost-efficiency, the actual challenges of a given incident and the relevant legal framework. The chances of achieving a successful response, judged as reasonable, are much enhanced by having a well thought out wildlife response plan which has involved (and been critiqued by) all stakeholders as well as experienced wildlife responders. The plan must have clearly defined and agreed objectives so that it provides sound guidance on the array of measures that can be chosen to best fit an incident, based on the recognition of critical factors and the scalability of resources. In order to ensure a reasonable approach, an evaluation should be made quickly by an expert group where four fields of expertise are represented: oiled wildlife response, operational oil spill response, financial compensation, and natural resource and conservation management. The assessment made should translate into an incident specific wildlife action plan including the right mix of personnel and expertise on the ground and the right combination of response measures to fit the scale and circumstances of the incident. This in turn will maximise the possibility of cost recovery afterwards through

whichever compensation mechanism applies. The incident action plan for wildlife should be flexible enough to be scaled up or down as the incident unfolds or new information comes to light, but in most cases it must be recognised that all response efforts are limited by the available capacity and resources. Communicating the approach taken to other stakeholders and the general public is of key importance to help bring expectations on what is reasonable closer to reality. Lastly, pre-spill planning, training and exercises are clearly conditions which will help to ensure that reasonable decisions will be taken at any time during a wildlife response.

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