

Creating a legacy of oiled wildlife response preparedness through the post-Macondo Oil Spill
Response - Joint Industry Project

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Aiuká¹, Focus Wildlife International², International Bird Rescue³, PRO Bird⁴, RSPCA⁵, SANCCOB⁶, Sea Alarm Foundation⁷, Tri-State Bird Rescue & Research Inc.⁸, & Wildbase at Massey University⁹, Wildlife Health Center at University of California, Davis¹⁰, and Wildlife Rescue Centre Ostend¹¹

#687447 ABSTRACT: In 2015, an ambitious wildlife response preparedness project was initiated; funded as part of the post-Macondo IPIECA-IOGP (International Association of Oil and Gas Producers) Oil Spill Response Joint Industry Project (OSR-JIP). The Global Oiled Wildlife Response System (GOWRS) Project, which involved 11 leading wildlife response organizations from seven countries, aimed to develop an international framework for oiled wildlife response as well as encourage the further development of wildlife response preparedness by industry and other stakeholders. This paper will provide an overview and assessment of the key outcomes of both the JIP-funded phase of the project (2015-16; development of internationally agreed standards and common operating procedures) and the second industry-funded phase (2017-18; focused on response readiness) in order to provide key background information to support the movement towards operationalizing the system.

INTRODUCTION AND BACKGROUND

Over the past 30 years (and, in particular, in the last 20), the public has increasingly expressed a strong desire in more comprehensive oiled wildlife response capabilities be developed by oil companies and their associated industries (Kelway et al. 2014). To support this, several regions have explored partnerships and contractual agreements between potential spillers and professional wildlife organizations (e.g., non-profit groups, universities, and for-profit companies) to establish Tier 1 (and limited Tier 2) planning, training and response capacity. However, while such regional efforts have taken root in key areas, oiled wildlife preparedness on a global scale has largely lagged far behind other aspects of oil spill emergency and environmental planning by most government and industry members.

In part due to the Macondo/Deepwater Horizon oil spill in the northern Gulf of Mexico in 2010, at the Interspill Conference in London in 2012, key representatives from several professional oiled wildlife response organizations met representatives of the International Maritime Organization (IMO), the International Oil Pollution Compensation Funds (IOPC Funds), the International Tanker Owners Pollution Federation (ITOPF), IPIECA, OSRL, and a number of major oil companies to discuss the issue of oiled wildlife preparedness. At that meeting, it was largely acknowledged that there was a gap in global preparedness, and there was a significant need for development of a more robust infrastructure for the provision of oiled wildlife services. It was also acknowledged that previous efforts undertaken solely by the oiled wildlife response community, while initiated with best intentions, were failures largely due to lack of base funding and support outside of the individual organization support. The assembled group voiced their collective support, both moral and financial, for the development of a global oiled wildlife response system (or GOWRS). This global system was envisaged to provide

professional Tier 3 oiled wildlife emergency response services across the globe to industry and government clients and to integrate oiled wildlife more fully into oil spill contingency planning.

Following the Interspill meeting, oil industry representatives in attendance invited representatives of the oiled wildlife response community to submit a Terms of Reference for a project to explore developing a Tier 3 system for oiled wildlife response. This proposal was developed by 11 leading oiled wildlife response organizations, namely: Aiuká (Brazil); Focus Wildlife International (USA & Canada); International Bird Rescue (USA); Oiled Wildlife Care Network, UC Davis Wildlife Health Center (USA); PRO Bird (Germany); RSPCA (UK); SANCCOB (South Africa); Sea Alarm (Belgium); Tri-State Bird Rescue & Research Inc. (USA); Wildbase, Massey University (New Zealand); and Wildlife Rescue Centre Ostend (Belgium). Initial funding was awarded in 2013 as part of Phase I of the International Association of Oil & Gas Producers/IPIECA Oil Spill Response-Joint Industry Project (IOGP/IPIECA OSR-JIP) for an exploratory meeting in Brussels in 2013. This meeting provided an opportunity to scope the GOWRS project in terms of objectives and process.

In December 2013, representatives from the wildlife consortium presented the proposed work plan to a meeting of the OSR-JIP in Houston, and the Global Oiled Wildlife Response System (GOWRS) Project – the 20th Joint Industry-funded Project – formally began in July 2015. Through two two-year phases of project funding - first via the oil industry's post-Macondo OSR-JIP and, second, via the shareholders of Oil Spill Response Limited (OSRL) – the project partners set out to design an international framework for oiled wildlife response that would meet the requirements of both the industry and the wildlife response community.

This paper summarizes the scopes of work for both phases of the GOWRS project, the key deliverables and finding from each aspect, and the conclusions and proposed steps forward to fully operationalize a global oiled wildlife preparedness and response program.

METHODS

In working with both the funders of the Project as well as additional industry partners (formalized within an Industry Advisory Group, or IAG), detailed Scopes of Work were developed to direct and steer the activities of the Project partners. While these were designed to provide structure and clarity to both the project funders and partners, the funders also recognized that the project should not be ‘straight-jacketed’ by the Schedule of Work which allowed for flexibility in ensuring the project’s results could be informed by the process itself and be built upon in the next phase of the GOWRS initiative. Given the number of partners working in a variety of time zones and the ambitious objectives of the initiative, significant time and effort was invested into process design and project management to ensure that activities could be delivered in a timely manner to high standards through a process that also helped to encourage a positive collaborative spirit and greater familiarity and cohesion amongst the group.

The project process was built around a collaborative structure – defined in a Project Charter - in which smaller teams (GOWRS Working Groups) could serve as activity hubs within a larger governing body (GOWRS Project Steering Group), with the project process, objectives and deadlines facilitated by a coordinator. The project was ultimately overseen by a project manager from the principal contracting organization for the project (Sea Alarm). The IAG served as a bridge between the funders and project team providing input and feedback on draft deliverables to ensure the end result was fit-for-purpose. The funding allowed for remote workdays by the

project partners as well as an opportunity for the project team to meet in-person three times during the course of Phase I of the Project. In-person meetings not only allowed for concerted work on deliverables to occur, but also provided opportunities for project partners to tour other facilities and provide learning opportunities to their staff and other stakeholders.

GOWRS Project Scope of Work/Deliverables - Phase 1 (2015-2016)

- Governance Working Group: Develop governance model for long term management.
- Operations Working Group: 1) Develop a notification system for oiled wildlife responders; 2) Develop an assessment system for possible response (including mobilization and demobilization procedures); and 3) Develop response system for mobilization and demobilization of teams (including personnel, actions, and equipment needs).
- Animal Standards Working Group: 1) Develop online database of pertinent scientific documents; and 2) Develop Good Practices Document describing elements necessary for effective oiled wildlife preparedness and response.
- Readiness Working Group: 1) Develop incident management system to direct operational phase of the system (including contracting, rostering, protocols, and data management); 2) Define global equipment needs for tiers of oiled wildlife response; 3) Define recommendations for training of oiled wildlife responders (including competencies required and investigation of accreditation); and 4) Define recommendations for exercises to test tiers of oiled wildlife response and testing of the GOWRS Project SOP.

GOWRS Project Scope of Work/Deliverables – Phase 2 (2017-2018)

- Governance Working Group: 1) Establish and operate governance model; and 2) Develop structure and approach to long-term collaborative governance post 2018.

- Operations Working Group: Ensure GOWRS Project Partners can receive formal notification and mobilization requests in the event of an oiled wildlife incident.
- Readiness Working Group: Further develop operational readiness of system through focusing on training requirements/competencies, equipment & tools, and exercises.
- Education & Outreach Working Group: 1) Conduct outreach activities to OSRL Shareholders to ensure all have a clear understanding of the GOWRS Project; and 2) Conduct outreach activities to other stakeholders to ensure that the network becomes widely known.

RESULTS

GOWRS Project - Phase 1 (2015-2016)

Governance

An underlying assumption of the start of the project was a recognition of the value that each wildlife response organization has brought to the field through their own unique experiences and expertise. As such, the intention of the system was not to replace but to enhance these existing resources through a collaborative model that advanced standards and alignment and, in turn, improved capability. Given the above, these independent organizations needed to actively explore what type of structure would be required to support their ongoing collaboration on developing shared standards and for providing Tier 3 response to the oil industry.

Operations

A core output of Phase I of the GOWRS Project was a Standard Operating Procedure (SOP) that would allow for a third-party request for Tier 3 wildlife response resources to be received, assessed, and actioned by the GOWRS group. The SOP was designed to be a living document

that aimed to provide the activation process as outlined by flowcharts showing key steps in Notification, Assessment and Response processes. Key aspects taken into consideration were:

- Tier 3 mobilization cannot be guaranteed in all situations given the wide variety of in-country readiness and other important variables (i.e., culture, infrastructure, available local resources, government regulations). As such, the deployment of an assessment team was built into the process to allow for essential criteria to be checked and confirmed before a wildlife response would be mounted. These variables or criteria were developed into a list of ‘response pillars’ that would need to be met in order for a response to be activated.
- The composition of a response team would vary greatly depending on the incident location, conditions, species affected, and other factors. As discussed above, the intention of the GOWRS was not to create a single entity but rather improve collaboration amongst existing organizational resources. As such, the SOP includes certain decision-making processes and criteria to balance decisive action with a network-based framework which might result in only one or a small number of the GOWRS partners being formally activated to respond to a particular incident, taking into consideration existing arrangements at a Tier 1 or Tier 2 level.
- The SOP has no formal status as long as there is no formalized Global Oiled Wildlife Response System in place (i.e., funding to ensure response actions can occur). As such, the SOP was not designed to be copied into any emergency response plan, as it will provide false expectations. Similarly, the SOP was not intended to replace site-specific oiled wildlife response plans or any level of required preparedness as is described by the IOGP/IPIECA Good Practice Guide on Wildlife Response Preparedness (IPIECA-OGP 2014).

Animal Standards

Online Database - In the course of the project, it became clear that available publications should be catalogued within an online system and made available to both the oiled wildlife and the broader scientific community. Several online libraries were screened, with several issues arising, including the lack of most publications being in digital form and most online libraries not being freely accessible to the general public. It was agreed that the most important publications from the oiled wildlife response community, namely the 'grey literature' from the Effects of Oil on Wildlife (EOW) conference proceedings, should be made available immediately. After researching a number of options, the proceedings from all 12 EOW Conferences (1982 to 2015) were catalogued on the Mendeley online platform (<https://www.mendeley.com/>).

Good Practice Document - The GOWRS project partners, being very aware that specific treatment protocols can vary greatly and evolve quickly between organizations and within individual incidents, made the conscious decision to develop guidelines that embrace a broader definition of animal care principles. This Good Practice Guide was felt to allow the upholding of good practice as defined by a large number of wildlife response organizations while allowing for flexibility in the application of specific protocols to achieve these principles. The result of this work was a 68-page document which was published by IPIECA in 2017 as a technical support document to the Wildlife Response Preparedness Good Practice Guide.

Readiness

The intention of Phase I of the GOWRS Project was to lay the ground for a system that would require ongoing operational implementation through an active Readiness program. The core components of this program were organized around three distinct works streams – Equipment & Tools, Training Requirements, & Competencies and Exercises. A set of long-term objectives for system readiness were developed to map out and organize key tasks within the

Phases of the GOWRS Project. Tasks identified as foundational activities for achieving the above objectives were prioritized and actioned by the work clusters identified above.

Equipment & Tools - Various developed components were established, tested, and further developed to serve as an incident management system. These included: 1) Notification System (SMS alert); 2) Conference Call facility; 3) Cloud-based storage of SOP; 4) Incidents website for centralized confidential incident details; 5) GOWRS Assessment and Response Team roster; and 6) Coordination of notification and mobilization requests as described within the SOP. As part of the development of the SOP, electronic forms and templates for the various steps were created (and existing software services, such as those from The Response Group, explored), including important procedures regarding safety, conduct and communication during a response.

Global Equipment Needs - Modular-based equipment lists for each of the key process areas for oiled wildlife response were developed, including field operations (e.g., hazing and capture equipment), rehabilitation and facility equipment (e.g., veterinary requirements and release equipment), and the identification of equipment for extreme environments (e.g. hot and cold). Simultaneously, a list of current equipment stockpiles from both GOWRS project partners and oil spill response organizations (OSROs) was compiled as a first iteration of a comprehensive list of deployable equipment for Tier 3 response. The intention of these activities was to assist oil industry, including OSRL and the Global Response Network, in optimizing the efficiency of, and balance between, deployable, modularized stockpiles and identified, procurable equipment as well as identify potential local, regional and global suppliers.

Training Requirements & Competencies - Knowledge, skills, and abilities (KSAs) necessary to fill certain roles within the Assessment and Response teams (as defined within the SOP) were defined, as well as tools and information to assist in the team selection process were developed.

Personnel requirements for all assessment and response positions were drafted, and a matrix efficiently capturing these details for use in emergency responses was created. Currently available and necessary training programs relating to defined functions within the wildlife branch were also identified and captured to help standardize the training of GOWRS responders.

Exercises - A list of key recommendations was developed for stakeholders regarding the effective testing of wildlife response capability through drills and exercises. Effectively integrating oiled wildlife response into formal exercise programs allows for an assessment of company and country capability (as well as the future implementation of preparedness based on lessons learned) and also provided GOWRS Partners with opportunities to test the developed Tier 3 system, including notification, mobilization, and assessment procedures. This list of recommendations also incorporated lessons learned from the GOWRS table-top and deployment exercise with ExxonMobil's Regional Response Team in Malaysia in September 2016. The GOWRS Project Team also worked with the IAG to identify further opportunities to participate in large-scale company drills and exercises during Phase 2 of the project.

GOWRS Project - Phase 2 (2017-2018)

Governance

Recognizing that the future of the international framework for wildlife response depended upon the development of an agreed governance structure, it was acknowledged that there was a key distinction between the ongoing collaboration between the affiliated wildlife response organizations (intra-sector partnering which is currently defined by a declaration of intent) and the GOWRS Project (which is a long-term multi-stakeholder programme also involving industry and governments). Given this distinction, the Steering Group identified a series of principles and actions, including the development of a collaboration agreement to serve as the basis for formal

cooperation in the future. Two subcommittees, a Contracting Working Group and a Coordination/Decision-Making Working Group, were established to continue exploring key practical and philosophical questions regarding ongoing collaboration.

Contracting - Different contracts used by different GOWRS Project members were examined to explore how the organizations could work together most effectively to contract with other stakeholders. Common clauses and unique elements were identified, a bullet list of clauses that were deemed necessary and optional were established, and a model standard contract was developed that could be used by all parties (similar in nature to the BIMCO response contract).

Coordination and Decision-Making – A first draft of a collaboration agreement – a non-legally binding umbrella agreement for partnering – was developed, which included objectives for collaboration from each participating organization, information on what each could contribute to the collaboration (e.g., time, expertise, equipment, funding etc.), and what was considered threats or concerns in regard to international collaboration. In order to develop these contributions, each organization conducted an internal workshop with its key stakeholders. Together, these individual statements helped define and protect the principles of the collaboration and build an atmosphere of trust and transparency around the partnership and its objectives. As an outcome to this effort, it was determined that the most appropriate structure for the ongoing collaboration would be as an unincorporated network focused on preparedness. As such, clear communications was necessary to industry stakeholders that the Network should not be considered a response entity in itself at the time, but rather a gathering place for wildlife response organizations to develop/share good practice, support/represent the oiled wildlife response community, and promote effective wildlife response preparedness to other stakeholders.

Operations

Phase II of the GOWRS Project was considered an opportunity for ‘beta testing’ of the draft GOWRS SOP. During this Phase, the SOP continued to operate only within the context of the project (rather than as part of any assured response arrangement). The aim therefore was to develop specific exercise tests (internal exercises involving the project partners and external exercises with OSRL member companies) that served as both an opportunity to test and refine the procedures, as well as to explore with end-users their future responsibilities to operationalize tiered preparedness and response for oiled wildlife within their own emergency response procedures and preparedness programs. In spite of efforts by the GOWRS Project Group and IAG to stimulate exercise opportunities with OSRL members, no such opportunities materialized. As such, while the SOP described a process for notifying response organizations of a request for international assistance, its ability to mobilize responders and the conditions needed to enable oiled wildlife response to be initiated in a given country remained unexplored. As funding for a guaranteed Tier 3 service were not available beyond this Project phase, an proposal for operationalizing this SOP was provided to OSRL for consideration in December 2019, and is summarized in an additional 2020 IOISC paper (Grogan et al., 2020).

Readiness

Training Requirements & Competencies – A collectively agreed-to wildlife branch organizational chart was developed; in doing so, it became clear that there was a need to standardize terminology for each role, as different organizations used different terms to describe the same role (e.g., supervisor versus manager). This standardization was achieved through comparison of job descriptions between all organizations and larger international oil spill-affiliated stakeholders, cross-referencing terminology used and agreed to in the overall JIP program, and discussion to reach agreement about each particular role. After completing and

agreeing to the KSAs required to fill appropriate positions within the organizational chart, overall depth of staffing capacity within the GOWRS Project Partners was assessed based on the documentation of qualified personnel (as a self-assessment) in a response personnel matrix. This matrix categorized personnel based on being able to fill Assessment and/or Response roles, differentiated categories within positions (e.g., coordinators versus supervisors versus staff), and enumerated staffing levels per organization. The results of this exercise showed that, while numbers of available staff at the higher categories were understandably fewer, overall depth of coverage for most assessment and response categories were robust enough to support a moderate- to large-scale Tier 3 response should resources be shared. Data on existing training programs currently being offered by each member organization were collected, and a ‘gap analysis’ was conducted to determine what the next steps should be in a future project phase to expand further the training of oiled wildlife responders. From these data, it was felt that defining the standard principles for wildlife response training was necessary to allow individual organizations to either develop training programs aimed at conveying “best practices” in the field, or to be able to review existing offerings to determine what is appropriate. More specifically, Learning Objectives (LOs) should be collected and standardized for all existing training courses, establish what key LOs are required for each role identified in the organizational chart, then compile these data as an additional IPIECA support document.

Equipment - An online equipment survey was developed to gather information from oil companies represented on the IAG and from OSROs, including OSRL, to identify current stockpiles of internationally deployable equipment. Wildlife response organizations participating in the project also provided information on their own equipment stockpiles. The result from this survey was, while individual organizations, states, or countries have equipment in different

quantities with different mobility capabilities, there are very few globally-available equipment caches. Another equipment-related activity was to develop baseline oiled wildlife response equipment lists, including specific needs based on geographic variables and taxa groupings. Lists of essential baseline or minimum equipment required for a response (including the need to pre-purchase or locally procure) were developed, including consideration for personal response equipment, first 48 hours. response stages (e.g., hazing, capture, and rehabilitation), equipment for extreme conditions (e.g., hot and cold climates), and species-specific equipment.

Exercises – A structure and schedule for internal exercises for the GOWRS Project Partners was established (and conducted) as follows:

- Notification drills (two per year) - Conducted using SMS notification to test the accuracy of contact information and the real-time response of Project Partner organizations.
- Mobilization drills (two per year) - Testing initial notification plus the ability to convene a Strategic Team conference call with limited notice, and the decision-making process for a potential mobilization of an international assessment team.
- Table-top exercises (one per year) - Testing notification and Strategic Team decision-making plus table-top/field testing of on-site assessment based on a given scenario.

Through these internal exercises, the Project Team was able to test the functionality of notification as well as make updates and refinements to the SOP (e.g., addition of a decision-making process for Assessment Team composition and refinements to personnel requirements for Assessment and Response Teams). Where possible, these exercises utilized the facilities of the hosting organization to enhance the realism of the scenario. Through the hotwash evaluations, it was clear that these exercises were an incredibly valuable aspect of the project, serving multiple functions from training and education of response personnel and improving

operational readiness of the SOP to team building between the multiple project partner organizations. As described above, external exercise opportunities did not materialize in partnership with industry in Phase II. In order to address this, additional guidance material for IAG representatives and their companies was developed to break possible exercises into a series of smaller, more digestible exercises modules: 1) Initiating the Wildlife Branch; 2) Tier 3 notification & deployment; 3) Tier 3 assessment & planning; 4) Tier 1 & 2 activation & deployment (including training/capacity building); and 5) Establishing full wildlife operations (field and/or facility activities). For each module, a series of objectives was defined, allowing the end user to focus on individual aspects of the response with the intention of developing operational competency over time using the exercise types (discussion-based to operational) described by IPIECA-IOGP (IOGP/IPIECA 2014).

Education & Outreach - The IAG continued to play an important role during Phase II, providing advice, support, and information to the GOWRS Project Partners as well as attempting to stimulate exercise opportunities within their companies. The GOWRS Project Partners and the IAG also presented at 11 international meetings on the efforts and results of the GOWRS Project. In addition to the agreed Scope of Work for Phase II, the GOWRS Project Steering Group worked with IPIECA to electronically publish the Animal Care Principles, which were developed during Phase I. This document was published in December 2017 as ‘Key principles for the protection, care and rehabilitation of oiled wildlife,’ a Technical Support Document to accompany the IPIECA-IOGP guidance on wildlife response preparedness.

CONCLUSIONS

The successful conclusion of the two Phases of the GOWRS project represents a pioneering development in both the level of international collaboration amongst the oiled wildlife response community and commitment to the integration of wildlife response preparedness on a global level by the oil industry. During the four years that the GOWRS Project was funded, the Project Partners developed significant work products that are a benefit to all stakeholders interested or involved in oiled wildlife response. The SOP and Animal Standards documents can be used for response planning and instruction, the readiness materials can inform parties of necessary resources required to meet international standards, and the internal exercises have allowed project partners to work together in Tier 3 “environments” to test capabilities. However, one of the most significant outcomes of the GOWRS Project was the crystallizing of an effective working relationship between the world’s leading oiled wildlife response organizations. Internal testing of governance structures has enabled the project partners to determine their preferred common identity for the future. The in-person meetings have been essential in strengthening these bonds, which is now feeding back to other team members within each organization.

For the oil industry, one of the main drivers for funding the GOWRS Project was that a lack of Tier 3 capability in oiled wildlife response was seen as a gap and therefore a vulnerability in response preparedness. As such, the two project phases aimed to develop components of what eventually could become a formal international response capability for the oil industry. Through the course of the project, however, the project team has determined that the critical gap is in fact a lack of Tier 1 and Tier 2 capability - currently minimal or non-existent in many countries and often poorly funded in others. The next step for the oil industry is therefore to create clear objectives for oiled wildlife response and then develop wildlife response plans for all operational locations that define the tiered response arrangements required to achieve their objectives. This

will likely require a long-term approach; building response capability for Tiers 1 and 2 over time in collaboration with other local stakeholders (such as government and NGOs). In this context, Tier 3 (international resources) should be primarily seen as a way to achieve preparedness, not as a response solution, that supports an oil industry commitment to enhancing local and national response capability, especially in key target geographical areas, and ensuring their long-term viability. Until these initial planning steps are taken by the industry, a Tier 3 wildlife response solution will not be feasible in the short-term.

In a similar vein, while the accomplishments of the GOWRS Project are notable, it needs to be acknowledged that the system developed remains a prototype supported only by project structure that followed a readiness work program. Funding to be able to support the infrastructure of 24/7 availability of 11 oiled wildlife response organizations to be able to deploy immediately for oiled wildlife situations has not yet been acquired. As such, the GOWRS system should not be considered operationalized as a response option for Tier 3 spills. It must also be made clear that it should not be assumed that Tier 1 and 2 capability is available in countries where GOWRS Project members are based. The GOWRS Project organizations are each funded in different ways and some are not contracted to provide these services and, as such, cannot provide a guarantee of a response. Industry must recognize that if it wishes to call upon the services of these organizations, they must invest in them so they can further develop their own preparedness systems. In turn, they will be much better placed to assist with developing preparedness in other countries and to respond to international assistance when required.

The attainment of wildlife response preparedness on a global scale will require a long-term commitment by all stakeholders and a recognition of their ongoing responsibilities. The development of international standards as part of the GOWRS Project was an important step in

that long-term preparedness journey, but the focus for the future must be on disseminating and implementing good practice at a local and national level. The best role for the international wildlife response community to play in this process going forward is as collaborators – providing expertise in planning and in delivering ongoing preparedness activities (i.e., planning projects, trainings and exercises) to the industry and other stakeholders. This will ensure that the important groundwork to develop local and national response capabilities is undertaken, given that Tier 1 and Tier 2 preparedness remains the bedrock of effective oiled wildlife response. This process, which involves the development of quantified response capability across all three response tiers, is well defined in guidance material on the topic, developed during the OSR-JIP (IPIECA-IOGP, 2015). If applied to oiled wildlife response preparedness - as also defined by the industry (IPIECA-IOGP, 2014) - it would ensure that the GOWRS project's outputs rightly serve as an important foundation and a catalyst for future efforts to progress along the preparedness journey, rather than being seen as the final destination on that journey.

Recommendations

- Stakeholders must understand the outputs of the GOWRS Project within the context of tiered preparedness, in particular that an outcome of the GOWRS Project is not a Tier 3 response entity and cannot be mobilized as such. However, the GOWRS Project Partners are keenly interested in providing this as a service from 2021 onwards, and have presented a proposal to OSRL for consideration as summarized in Grogan et al. (2020).
- Stakeholders must understand the limitations of the concept of a Tier 3 oiled wildlife response solution, and ensure that investment is made in Tier 1 and 2 systems that include equipment, response personnel, and an ongoing maintenance program in conjunction with defined objectives for wildlife response (including a written wildlife response plan).

- Industry should support the development of additional wildlife-related good practice guides and technical support documents, including case studies of existing preparedness programs as a resource for stakeholders seeking to advance preparedness in other countries and regions. This should include, among others, guidance on standard principles for wildlife response training, designing and deploying an effective exercise programme for wildlife response, and development and deployment of wildlife response equipment
- All stakeholders should include meaningful tests for wildlife response through exercises, both as part of large-scale oil spill exercises and as standalone events, with consideration being given to adopting the GOWRS Project Exercise Modules concept as a way to develop an industry exercise programme that builds understanding of and preparedness for wildlife response over the course of successive events.

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