

Lower Mekong Portfolio: Interim Evaluation

prepared for the

John D. and Catherine T. MacArthur Foundation's
Conservation and Sustainable Development Program

April 9, 2015

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1. Executive Summary

This report summarizes a **portfolio evaluation of the MacArthur Foundation’s conservation investments in the Lower Mekong region since 2011**. It is explicitly a portfolio-level evaluation, focusing on common themes rather than individual grants. The evaluation involved **understanding the portfolio context** through reviewing relevant documents and speaking with donor partners; **gathering data** from MacArthur grantees; **calibrating initial evaluation findings** through consultations with independent regional experts and donor partner grantees; **improving future evaluation ability** by cooperating with NatureServe to improve the Lower Mekong Dashboard; and **presenting results** in this evaluation report and to MacArthur directly.

The MacArthur Foundation in the Lower Mekong

The Greater Mekong region is one of the world’s biodiversity hotspots, holding remarkable levels of unique biodiversity under severe threat. In 2011, the MacArthur Foundation’s Conservation and Sustainable Development (CSD) program launched a 10-year grant-making initiative under a new strategic framework. The Greater Mekong Regional Strategy retains MacArthur’s historic **focus on biodiversity and ecosystem conservation** but gives **greater emphasis to the value that these ecosystems have for the people and economies that depend on them**.

Grant-making under this new strategic framework began in 2012 with a three-year investment focused on the Lower Mekong. This investment was designed as part of a **regional collaboration between MacArthur and three other donors**—the Critical Ecosystem Partnership Fund (CEPF), Margaret A. Cargill Foundation, and McKnight Foundation. The four donors invested in an extensive, stakeholder-driven process to define geographic and thematic priorities. The donors then divided up the eleven thematic priorities among each other, to ensure that all were covered (some by multiple donors).

MacArthur’s choice of thematic priorities was driven by a desire to test its theory of change for the Lower Mekong: *‘Deepening the understanding of the benefits provided to the economies and people of the region by the biodiversity and natural habitats of the Mekong River basin and expanding incentives to conserve them will result in broader and more effective implementation of direct conservation action in the highest priority sites and landscapes. This will reduce pressures on high biodiversity landscapes, slow current trends of degradation and ecosystem service loss, and eventually reverse them.’* Specifically, MacArthur selected four thematic priorities: (a) Understanding and responding to increased environmental pressures from development and climate change impacts, (b) Creating and expanding incentives to conserve ecosystems, (c) Assisting the rural poor in managing natural resources for multiple benefits, and (d) Evaluating the impacts of conservation investment on biodiversity and human well-being. The CSD portfolio in the Lower Mekong now consists of **23 grants totaling \$6.88 million**, intended to **complement its recent Upper Mekong and Mekong region-wide portfolios**.

Changing regional context

Like most rapidly-developing regions of the world, significant biodiversity losses have been incurred in the Lower Mekong in recent years. These are to be expected, and reinforce the importance of the donor partner prioritization of geographic and thematic areas. The region is biologically, culturally, politically and economically diverse, and so requires **tailored approaches to individual countries** and emerging threats and opportunities.

With rapidly increasing information availability in the Lower Mekong, **local people are becoming**

more empowered to tackle governments, and are having a greater influence. **Civil society is collaborating across national borders and adopting more sophisticated approaches**, such as innovative legal strategies and campaigns to influence development project financiers. National capacity for conservation remains insufficient but is increasing, and **educated young people are increasing involvement** in environmental issues.

Nonetheless, powerful individuals are resisting rapid societal change. **It remains difficult to influence large-scale infrastructure projects** that have significant momentum and high-level vested interests. However, new projects are being more cautiously developed, and there may be opportunities to mitigate their impacts. **International investors and companies are becoming significant stakeholders in regional development**. This poses challenges, through increasing the pace and scale of threats, but also increases opportunities – since international companies are often more easily engaged on environmental and social issues.

MacArthur achievements and opportunities

Despite conservation challenges in the region, **MacArthur has funded some significant advances in approaches to tackling threats**. In particular, investments in advocacy around agriculture, hydropower and other large-scale developments appear to have greatly raised public awareness of their environmental and social impacts, and also increased government and investor caution about such developments in the future. **MacArthur has deliberately experimented with diverse approaches and promising new strategies** to critical issues, even when chances of success have been low. Such innovation is essential given the region's rapidly changing socio-political context. MacArthur's continued focus on biodiversity, increasingly uncommon among donors, is of tremendous value to its grantees.

Conservation usually requires complementary strategies of urgent threat reduction (e.g., focused on sites or species) and support to longer-term enabling conditions (e.g., broad policy issues). Neither will ultimately be effective in isolation. Under the current investment, MacArthur reduced support to intensive protection of sites and species owing to interest from donor partners in funding such work. MacArthur's current focus on long-term capacity, funding and policy improvement will need to be sufficiently complemented by **continued support to directly reducing threats of development** (from itself or other donors) until such enabling conditions are secured.

Deepening understanding of the benefits provided by ecosystems is a necessary policy step but not sufficient to lead to effective conservation action. Even when governments understand the negative consequences of unsustainable development, incentives for personal gain by a powerful elite often override a focus on the greater good. A **greater emphasis is thus needed on addressing limited political will**. MacArthur has supported some efforts to tackle limited political will, but an emerging opportunity is sustained support to ethical individuals governing natural resource use.

MacArthur has funded some important science, but investment in this area may have been disproportionately large given its influence on desired outcomes. To be most effective, any future science investments need to build a strong understanding and ownership of the process and results among decision-makers or other key stakeholders by involvement from the earliest stage.

MacArthur has invested heavily in selection of strong grantees, and subsequently given them space to grow, experiment and adapt. The Foundation's **flexible, hands-off approach to grant management has given grantees the ability to innovate and adapt** to rapidly changing conditions on the ground. Nonetheless, **increased focus on promoting communication and**

collaboration among grantees and across MacArthur grant portfolios could offer great value. **Coordination with other donors has increased MacArthur's efficiency but could be extended further**, both to include other donors and to expand the set of potential grantees.

We believe most of **MacArthur's conservation investment in the Lower Mekong has been well targeted and shows great promise for achieving long-term conservation outcomes** – although it is too early in the investment cycle for most of these outcomes to have yet been realized. We thus recommend that the majority of investment themes be continued. In a few cases, lessons that have been learned suggest useful alterations to current investment emphasis. Last, two key gaps have emerged in regional donor strategies, offering opportunities for new investment emphasis. These are detailed below.

Recommendations for future investment

Achieving the objectives outlined in the Lower Mekong Work Plan will require **MacArthur remain engaged over a time horizon greater than five years**. We offer the following key recommendations for future investments:

Continued emphasis (promising work to be continued):

- Build on existing galvanization of civil society by (i) building better links among grantees and portfolios, and (ii) increasing donor linkages to bring more social- and development-focused actors into an alliance against irresponsible development.
- Maintain a two-pronged approach to improving corporate best practice: continue support to campaigns critiquing companies and their financiers, but also increase support to engagement of companies under pressure to help them improve their mitigation.
- Tackle vested interests head-on through name-and-shame media campaigns and building alliances with the more ethically-minded decision-makers.
- Directly safeguard priority key biodiversity areas and threatened species, which may not otherwise survive to see the longer-term benefits of policy work.
- Capitalize on national desires for regional natural resource security, and political relationships among countries, to tackle decisions on mega-development at an appropriately high level.
- Commit to long-term engagement in the region and in grantees to ensure lasting successes.

Altered emphasis (adjustments that could be made owing to lessons learned since 2011):

- Complement the focus on trying to cancel planned mega development projects with increased efforts to (i) avoid the worst developments in the first place and (ii) influence the design and operation of the projects that cannot be avoided. This will require new approaches to engage government planning/industry ministries and other key actors (e.g., Asian Development Bank), and learning lessons from prior efforts such as Strategic Environmental Assessment.
- Improve targeting of science to help powerful audiences find solutions, rather than simply understand problems. Ensure that science investments are fit for purpose and targeted to the level at which decisions are made. Key enhancements would be increased focus on economic implications; accessible, targeted local language summaries for governments, local people and the media; and greater involvement of scientists from the region.
- Strengthen implementation of existing policies, or new policy development where necessary, that would reduce pressure on natural ecosystems and biodiversity.
- Learn lessons from, and build on, monitoring to date (including the Dashboard). Improve, and capitalize on the value of, the existing logframe for monitoring portfolio progress.

New emphasis (emerging gaps since 2011):

- Tackle soaring wildlife trade through support to tailored actions addressing consumer attitudes, reducing ability of middlemen to operate, and changing hunter behaviors.
- Support the development of future leaders through training and sustained early career mentoring to give ethical, motivated young people a lead in obtaining or retaining key natural resource management positions in government and civil society.

These recommendations were presented at a March 2015 grantee workshop in Siem Reap, Cambodia. Those considered of highest importance by grantees were, in order of priority, to 'Directly safeguard priority key biodiversity areas and threatened species', 'Improve targeting of science' and 'Strengthen implementation of existing policies'. Appendix H offers some specific grantee suggestions for advancing each of the recommendations.

2. Background

The Greater Mekong region is one of the world's biodiversity hotspots, holding remarkable levels of unique biodiversity under severe threat from human activity. In 2011, the MacArthur Foundation's Conservation and Sustainable Development (CSD) program launched a 10-year grant-making initiative in the Greater Mekong under a new strategic framework. The Greater Mekong Regional Strategy (2011-2020) retains MacArthur's historic focus on biodiversity and ecosystem conservation but gives greater emphasis to the value that these ecosystems have for the people and economies that depend on them.

Grant-making under this new strategic framework began in 2012 with a three-year investment cycle in the Lower Mekong (Figure 1). The geographic region of focus is the Mekong River and its major tributaries and sub-basins, and the Tonle Sap and its inundation zone and catchments. This represents a shift in conservation priority under the new strategic framework from the forests of the Annamite Mountains to the freshwater ecosystems and associated watersheds of the Mekong Basin, where biodiversity is more strongly linked to provision of livelihoods and food security for people. Subsequent funding, not evaluated here, began for the headwaters of the Mekong River in China and for basin-wide initiatives in 2013 and 2014.

To guide its investments in the Lower Mekong, MacArthur collaborated with three other donors—the Critical Ecosystem Partnership Fund (CEPF), Margaret A. Cargill Foundation, and McKnight Foundation—to develop a joint grant-making strategy. The donors funded an update to the CEPF Ecosystem Profile,¹ a process that engaged more than 470 stakeholders to define geographic and thematic priorities for conservation in the Lower Mekong. The identification of key biodiversity areas (KBAs) – sites of international significance for biodiversity – and priority corridors established the geographic priorities, while eleven mutually-reinforcing strategic directions were defined as the thematic priorities. These strategic directions represent the collective actions that civil society needs to pursue in order to reduce the loss of biodiversity and ecosystem services in the face of increasing threats from infrastructure development, expansion of industrial agriculture, and wildlife trade. Through a process of negotiation, the donors each selected a subset of the strategic directions to fund, generally aligned to internal priorities but also ensuring that all of the strategic directions received investment (Appendix B). For example, MacArthur chose not to invest in wildlife trade and species conservation, because those strategic directions were seen as covered

¹ http://www.cepf.net/SiteCollectionDocuments/indo_burma/IndoBurma_ecosystemprofile_2011_update.pdf

by CEPF, focusing instead on biodiversity mainstreaming, minimizing the impacts of plantations and dams, and monitoring.

Figure 1. Map of the Lower Mekong sub-region



Nonetheless, it is important to note that – within this overarching strategic framework – MacArthur has continued to follow a historic approach of selecting strong people and organizations, and supporting them over the long-term. This approach differs from other donors such as CEPF, and is reflected in MacArthur’s intensive investment in selecting which proposals to fund, and relatively light management of grants once made.

MacArthur’s theory of change for the Lower Mekong is that *‘Deepening the understanding of the benefits provided to the economies and people of the region by the biodiversity and natural habitats of the Mekong River basin and expanding incentives to conserve them will result in broader and more effective implementation of direct conservation action in the highest priority sites and landscapes. This will reduce pressures on high biodiversity landscapes, slow current trends of degradation and ecosystem service loss, and eventually reverse them.’* This theory of change is applicable across society, from the subsistence activities of local communities to decisions about natural resources made by national governments. A number of assumptions underlie the theory of change, for example, that grantees can describe the importance of high biodiversity ecosystems to sustainable economic growth persuasively to key decision makers and illustrate ways to generate positive incentives for environmental stewardship at the highest priority sites and landscapes.

Guided by its Lower Mekong Work Plan, MacArthur awarded grants along the following thematic priorities, corresponding to four of the strategic directions in the CEPF Ecosystem Profile: (a) Understanding and responding to increased environmental pressures from development and climate change impacts, (b) Creating and expanding incentives to conserve ecosystems, (c) Assisting the rural poor in managing natural resources for multiple benefits, and (d) Evaluating the impacts of conservation investment on biodiversity and human well-being.

The Lower Mekong portfolio evaluated here consists of 23 grants totaling \$6.88 million that complement the investments of other donors in the region (Table 1). Although grant-making in the Lower Mekong began in 2012, a few grants experienced a significant delay between approval and the first payment and were thus in their first year of implementation at the time of this evaluation. Grants in the Upper Mekong, Mekong region-wide and global China footprint portfolios are intended to complement MacArthur’s investments in the Lower Mekong (Appendix C).

The grants in the Lower Mekong portfolio can be clustered broadly into the focal areas of science, policy and site-based conservation, with the bulk of the investment in policy and science and a handful of site-based projects. The decision by MacArthur to invest in fewer site-based projects than previously was a result of the decision to complement other donors, particularly Margaret A. Cargill, that wanted to make substantial investments in site-based work.

If MacArthur’s theory of change is valid and the grant portfolio is targeted effectively, the Foundation expects to contribute to the following long-term outcome, in alignment with Aichi biodiversity targets: *Current rates of biodiversity and natural habitat loss are reduced and ecosystem benefits are sustained by conserving priority sites and implementing appropriate policies in high biodiversity landscapes.* MacArthur has set four 10-year targets to measure its progress towards achieving this outcome, representing a subset of the Aichi biodiversity targets:

- Ecosystems services, particularly services related to water and fisheries, which contribute to health, livelihoods and well-being, are sustained;
- The extinction of known threatened species is prevented, particularly those most in decline;
- The rate of loss of natural habitats, including forests, is reduced and where feasible brought close to zero;

- At least 50 percent of priority sites for biodiversity and ecosystem services are under effective conservation management.

Progress towards achieving these 10-year targets will be tracked using broad-scale indicators in a regional Dashboard² developed by NatureServe through Foundation funding.

Table 1. List of grants in the Lower Mekong portfolio

Grantee	Grant Purpose
BirdLife International	To improve the management of Western Siem Pang dry forest ecosystems in Northeast Cambodia
Boston University Department of Biology	To improve the scientific understanding of water and fisheries resource use in the Tonle Sap region (over three years).
Conservation International	To maintain fisheries productivity and conserve aquatic biodiversity in the Tonle Sap in Cambodia (over two years).
Conservation International-CEPF	To build the capacity of local civil society to engage in more effective conservation activities in the Lower Mekong (over two years).
Documentation Center of Cambodia	To raise awareness about the impact of Cambodia's rapid development on its ecosystems and people through a documentary film.
EarthRights International	To strengthen public interest law capacity in Cambodia, Laos, Thailand and Vietnam through the Mekong Legal Network (over three years).
Fauna & Flora International	To build a new generation of scientists from highly qualified and experienced Cambodian conservation leaders and biologists in the governmental, non-governmental and academic sectors (over 6 months).
Global Wildlife Conservation / Saola Working Group	To improve detection of critical Annamites endemic species and create incentives for conserving these species (over three years).
Global Witness	To improve accountability for the impacts of agro-industrial development in Cambodia and Laos (over three years).
Inland Fisheries Research and Development Institute	To build a system to monitor fisheries and aquatic biodiversity in the Mekong watershed in Cambodia (over three years).
International Rivers	To build a strong civil society movement to protect rivers and defend the rights of communities in the Mekong River Basin
Living River Siam	To conserve riverine ecosystems and human rights in eight Thai provinces along the Mekong River (over three years).
Non-Timber Forest Products Organization	To secure and strengthen natural resource use rights for indigenous peoples in Cambodia (over three years).
Oxfam America	To strengthen the resource use rights of local communities and Indigenous Peoples in the Lower Mekong (over three years).
People and Nature Reconciliation	To strengthen biodiversity conservation and natural resource management in Vietnam and the Lower Mekong region (over three years).
People Resources and Conservation Foundation	To improve management of the Srepok River and its catchment in Cambodia (over three years).
Royal University of Phnom Penh	To improve management and monitoring of priority sites for conservation on the Sekong and Sesan Rivers in Cambodia (over three years).
Stimson Center	To strengthen transboundary water resource management in the Lower Mekong (over two years).
Sustainable Fisheries Partnership Foundation	To educate and mobilize Pangasius producers and the aquaculture sector in the Vietnamese Mekong Delta to respond to the threat of upstream dam construction.
University of Canterbury	To better understand threats to riverine ecosystems, forest catchments, and ecosystem services in the Sekong, Sesan, and Srepok river basins (over three years).

² <http://Dashboard.natureserve.org>

University of Washington College of the Environment	To collect and synthesize scientific knowledge about the biodiversity, fisheries, and food web ecology of the Mekong-Tonle Sap ecosystem (over three years).
Wildlife Conservation Society	To strengthen environmental governance in Cambodia and Laos (over three years).
World Wildlife Fund	To apply economic analyses to inform and advance conservation efforts in the Lower Mekong (over three years).

MacArthur has also set five intermediate outcomes, or medium-term objectives, for its Lower Mekong Work Plan:

- The contribution of high biodiversity ecosystems to economic growth and food/water security is reflected in national development strategies, particularly investment in agriculture and infrastructure, and national accounting systems;
- Policies that support widespread adoption of conservation incentive programs, such as payments for ecosystem services (PES), are developed and implemented in high priority sites and landscapes;
- Sites of particular importance for biodiversity and ecosystem services are safeguarded more effectively using decentralized and/or traditional resource management;
- Financing is increased for protected area systems, sustainable forestry programs, fisheries management, and ecosystem-based adaptation to climate change;
- Understanding is increased of the contribution of conservation action to human well-being.

Measurable 3-year targets have been established to track progress towards these medium-term objectives, which are reported on in section 4.4.

CSD sought to undertake this evaluation of its Lower Mekong portfolio to inform the next round of grant-making in 2015. The primary objectives of the evaluation are to understand how conservation prospects have changed since 2011, identify opportunities that may have closed and other new opportunities that may have opened, determine whether the focus on policy, science, and site conservation remains appropriate, and evaluate whether the theory of change and underlying assumptions remain credible and relevant. CSD is interested in knowing whether, at this early stage in grant-making, progress is evident towards Work Plan objectives and whether the societal conditions necessary to sustain conservation outcomes are being established, or whether there is a need to make any “course corrections” in strategy and grant-making.

In this evaluation, we were tasked with looking at how the context has changed in the Lower Mekong region and what implications this has for future grant-making. A CSD-wide evaluation in 2015 will address a set of wider contextual changes such as global economic changes, the shift to extraction of developing country resources, and trends in global donor interest.

3. Evaluation Approach

This evaluation is framed in a context of widespread global biodiversity decline, in which most threats continue to increase³. We feel that it is important to focus on conservation successes, in the face of inevitable background losses. Pragmatically, we feel it is important to recognize the situation will be most challenging in rapidly-developing countries, such as those of the Lower Mekong, and focus on approaches to securing gains in high priority geographic and thematic areas.

³ Butchart *et al.* (2010) Global biodiversity: indicators of recent declines. *Science* 328.

Evaluating progress towards MacArthur's objectives using the Dashboard indicators was not possible in the timeframe of this evaluation, because the indicators are intended to be updated every three years (on a rolling basis as data availability permits) and the post-baseline update is planned for later in 2015 and 2016. Our findings and recommendations are thus based on some initial outputs from the Dashboard (e.g., an analysis of forest cover change within investment sites in the Eastern Plains of Cambodia), but mostly from qualitative data compiled from grantees, donor partners, and independent regional experts.

We reviewed grant proposals and reports for all 23 projects and interviewed the CSD program and the three donors working closely with MacArthur in the region. We conducted an anonymous online survey to gather impartial data from grantees on the key evaluation questions and then interviewed all grantees as well as a number of other conservation, development and socio-economic experts in the region to gain additional context and deeper insights (see Appendix A for list of contributors). We also reviewed previous CSD and CEPF evaluations for the region.

We reviewed the NatureServe Dashboard in detail to understand how it could be used as a component of MacArthur's overall monitoring needs. We worked with grantees and NatureServe to identify a set of supplementary indicators that could be developed and incorporated into the Dashboard to provide a more responsive and comprehensive picture of conservation trends in the region, and helped develop a first counterfactual analysis. Together with inputs from interviewees and independent experts, our insights into MacArthur's overall monitoring needs developed beyond the remit of this Lower Mekong evaluation. They are, however, summarized in Appendix J as a preliminary input to more in-depth evaluation of the whole CSD program in 2015.

We presented our evaluation results to a small group of independent (i.e. non-grantee) experts with extensive experience implementing conservation programs and projects in the Lower Mekong (Appendix G). This calibration step was important to address any potential bias from grantee responses, which arguably may reflect vested interests in the outcome of the evaluation. Finally, we facilitated a workshop of MacArthur grantees, CSD staff, two board members and key external representatives in Siem Reap, Cambodia (March 2015) in which we presented the evaluation findings and sought input on our recommendations (Appendix H).

Appendix D presents the overall evaluation methods in further detail.

4. Major Findings

4.1 How have the prospects for conservation changed since 2011?

Fast-paced economic development has led to some serious conservation challenges in the Lower Mekong since 2011. However, rapidly changing societal contexts, and changing corporate attitudes globally, offer new opportunities to further conservation.

As can be seen in any developing region globally, there is a continuing background rate of biodiversity loss in the Lower Mekong. Losses have been significant since 2011, commensurate with the fast-paced development of the region. For example, Lao PDR is moving forward with the construction of mainstream dams despite the opposition of its neighbors, and the Lower Mekong River will be blocked for the first time in early 2015. Likewise, facilitated by extensive road building and increased trade (eased by agreements such as the ASEAN Free Trade Area), deforestation from

economic land concessions and illegal logging continues to increase. Compounding these impacts, soaring wildlife trade, fueled by increased Asian wealth and heightened demand for wildlife – particularly in China and Vietnam, is having catastrophic impacts on biodiversity. Further, a recent crackdown on civil society, particularly in Lao PDR, has made conservation more challenging.

Improved access to information in the region, including the penetration of social media, appears to be hastening political change and civil society confidence. For example, in Vietnam, civil society has seen greater access to government agencies and policy-makers, and awareness of the threats posed by large dams has resulted in the cancellation of many hydropower projects. Significant political changes in Cambodia – where a rapidly strengthening opposition party has obliged the ruling party to address environmental issues – also suggest cause for optimism, but it is too early to know whether these changes will endure or ultimately be positive.

4.1.1 Have conservation prospects improved or worsened?

While there was consensus that significant biodiversity loss had occurred, there was a range of opinion among grantees on whether conservation prospects have improved or worsened (Appendix E). Grantees working primarily in Vietnam or Thailand, or based outside of the region, tended to report that conservation prospects have improved because of increased civil society capacity and coordination, as well as greater public awareness of both conservation challenges and environmental values. For example, Box 1 outlines a case in which MacArthur grantees facilitated and capitalized on these improvements in civil society capacity and public awareness. Conversely, grantees working primarily in Lao PDR or Cambodia tended to feel that conservation prospects had worsened. They noted that the key threats to biodiversity and ecosystem services have increased and government responses have remained inadequate or have weakened. For example, in Cambodia a moratorium on the granting of new economic land concessions remains in effect, at least on paper, but the continued development of existing concessions is contributing to land grabbing and high deforestation in neighboring areas, including within protected areas.

Box 1: Thai communities join forces with NGOs to challenge Xayaburi dam

The 1,285 MW Xayaburi hydropower dam in Lao PDR stands to have significant transboundary effects on biodiversity and food security in the Lower Mekong Basin. Formal objections by Vietnam and Cambodia to the project have been ignored, and dam construction has proceeded apace. MacArthur grantees have supported affected communities to oppose this project through legal work (EarthRights International), advocacy campaigns (International Rivers) and capacity building (Living River Siam). In June 2014, Thailand's Supreme Administrative Court agreed to hear a lawsuit filed by the Community Resources Center, supported by EarthRights, on behalf of the Network of Thai People in Eight Mekong Provinces challenging the legality of the Xayaburi Power Purchase Agreement. Although it was a procedural rather than a substantive victory, the surprising decision to hear the case set an important legal precedent because it will require state-owned companies to comply with Thai law in international projects and any future Power Purchase Agreements signed in Thailand to have a transboundary Environmental Impact Assessment.

We agree with general grantee sentiment that conservation prospects have improved in Vietnam and Thailand, but worsened in Lao PDR and Cambodia. However, differing personal perceptions also had a role to play. Some grantees saw issues such as the Lao dams going forward as “closed doors” and thus failures, while others focused more on the smaller gains that have been made against these background losses. A case in point is the widely differing opinions on the Mekong River Commission. Some grantees viewed this as having failed in its mission to ensure regional cooperation over the sustainable use of water resources while others felt that it was key as the only

institution with the mandate and capacity for regional engagement and its absence would have resulted in chaos.

4.1.2 Have specific opportunities identified in 2011 diminished or closed?

Grantees were asked whether specific opportunities that MacArthur identified in 2011 had diminished or closed. There was more confidence that opportunities remained in measuring and communicating impacts of conservation investment than in other areas of MacArthur focus, particularly the opportunity for influencing large-scale development. A number of grantees felt that the opportunity for expanding payments for environmental services approaches never existed, while others felt that this and other opportunities have actually increased in the past few years. Grantees repeatedly noted the importance of MacArthur's flexibility in allowing grantees to respond to rapidly changing conditions in the Lower Mekong by pursuing different strategies during the course of a project (Box 2).

Box 2: Adapting to emerging opportunities: a new Protected Forest in Western Siem Pang

Located within the Mekong Basin, the dry forests of Western Siem Pang in Stung Treng Province, Cambodia, support populations of five Critically Endangered bird species. Historically, much of the area has been covered by a 100,000 ha economic land concession, by far the largest in Cambodia (and in considerable excess of the legal limit). With support from the MacArthur Foundation, BirdLife International worked with the Forestry Administration to designate 67,000 ha of the site as a Protected Forest and, after an advocacy campaign, this was ratified by the Government of Cambodia in early 2014. To secure the high conservation value forest lying outside the Protected Forest but within the economic land concession, BirdLife developed a business plan for a conservation concession based on high-end ecotourism, which would support local livelihoods and ecosystem restoration. This was seen as the only market-based scenario that could make an economic argument against development of the land concession. Behind the scenes, BirdLife supported the Forestry Administration to recommend a reduction in the size of the economic land concession in question and to have the area also designated a Protected Forest, to form the basis for any future conservation concession development. In January 2015, the Council of Ministers issued an executive order reducing the size of the concession by 90%, paving the way for this proposal to go ahead.

Some grantees still see ample room for influencing hydropower projects through building civil society coalitions, research, advocacy and creative legal tactics. They stated that there is more awareness at higher levels of government in Cambodia, Thailand and Vietnam of the devastating impacts that some Mekong dams will have, but noted that it is unlikely that a number of planned mainstream and tributary dams can be stopped, due to political and economic interests at stake. There is, however, considerable potential opportunity to influence how these developments operate. Dams can be designed and operated in ways that reduce some impacts on fish and people, and such mitigation measures can be monitored.

Grantees and independent experts said that the opportunity to influence management practices also applies to agro-industrial plantations. They noted that greater access to media and decision-makers such as the Thai Senate and Vietnamese National Assembly, as governments have become more accountable, has increased the voice of civil society on development issues. They also pointed out that public concerns in Cambodia regarding land grabbing for plantation agriculture and infrastructure projects are gaining political traction, while the Lao government has suspended new mining licenses due to complaints from communities. In future, MacArthur-funded work by UNEP-WCMC – to predict commodities trends and their impacts on biodiversity – might possibly enable MacArthur grantees to become more proactive in tackling such threats before they become too embedded. However, this work was not yet developed enough to fully assess during this evaluation.

Such work would best be able to respond to on-the-ground needs by early linking to relevant grantees by CSD, similar to that facilitated by the March 2015 workshop in the region.

We feel that change is likely to best be effected through complementary approaches of public campaigns and proactive engagement with companies and investors, many of whom increasingly have – or operate under – environmental standards. Improving current corporate/investor performance is often likely to be more productive than encouraging divestment, which may result in replacement with less responsible new actors.

4.1.3 Have new opportunities for conservation opened up for conservation?

Most grantees also identified new opportunities that have opened up for conservation since 2011. We highlight the following, which we feel are particularly promising:

- Increased availability and use of media, particularly social media, is leading to greater potential for raising public awareness and involvement around key projects and policies (Box 3).
- Facilitated by urbanization, educated young people are increasingly getting involved in environmental issues.
- Civil society is adopting some roles that have been traditionally held by government, e.g. the establishment of conservation concessions and direct management of forest guards.
- With the government’s removal of the fishing lot system on the Tonle Sap, which granted licenses to private owners to commercially fish in those areas, there is continued opportunity to directly influence the management of this resource in Cambodia.
- Companies are increasingly using biodiversity offsets as a tool to help compensate for development project impacts on biodiversity. These, and mitigation prior to offsetting, offer an opportunity for engagement (Box 3).
- There are now greater possibilities to influence Chinese companies/investments in a period when the country has becoming increasingly outwards-looking and is improving its environmental performance.
- A focus on alternative energies and increasing energy efficiency could help reduce demand for hydropower and proliferation of dams, which may not be genuinely viable investments (see specific suggestions from the March 2015 grantee workshop in Appendix H).
- There is significant room to improve coordination and collaboration between conservation, human rights, and development organizations working to achieve common goals (though these stakeholder groups are also likely to have some conflicting goals). Civil society is increasingly collaborating across national borders.

Box 3: A tale of two dams

The Lower Sesan 2 dam, at the confluence of the Sesan and Srepok rivers, is considered by many to be the most damaging of the tributary dams planned for the Mekong River Basin⁴. Despite a decade of community protests and scientific research quantifying the dam’s severe potential impacts on fish diversity and food security, including under support from MacArthur, construction of the project is proceeding. In contrast, the Cheay Areng dam in Central Cardamoms appears to have been halted in its tracks, with an announcement that the project will not go forward during the Prime Minister’s tenure. Although the fate of Cheay Areng is still uncertain, it appears that MacArthur-supported activities around Lower Sesan 2 – while unsuccessful in themselves – have helped improve civil society efforts to tackle future dams. A recent grant by MacArthur to Natural Heritage Institute (Appendix C) will focus on mitigation of Mekong tributary dams, including Lower Sesan 2.

⁴ Ziv *et al.* (2012) Trading-off fish biodiversity, food security, and hydropower in the Mekong River Basin. *PNAS*.

Lower Sesan 2 has backing from the highest level of Cambodia's government. Although concerns about the dam are widespread within some parts of the government, existing financial and political commitments to Vietnamese and Chinese investors leave virtually no chance the project will be canceled. Conservation NGOs were late to speak out on Lower Sesan 2 for fear of being labeled anti-development and so many important decisions had already been taken by the time some groups began to engage. Development NGOs were divided in their tactics, with some groups working on compensation issues and others advocating firm opposition. This division diluted the voice of the affected communities on Lower Sesan 2.

Having learned lessons from Lower Sesan 2, a different course was taken with Cheay Areng, where the new NGO Mother Nature united diverse parts of civil society (nature activists, indigenous people and Buddhist monks) in a groundswell of opposition to the project. This movement contributed a fresh voice to the debate and has been effective at mobilizing villagers. Armed with the experience of Lower Sesan 2, NGOs engaged early with Cheay Areng, by preparing technical briefing papers on the predicted biodiversity and livelihood impacts of the dam and ensuring they were consulted during the EIA process. There is even hope that efforts on Lower Sesan 2 have not been entirely wasted, with potential emerging to influence mitigation measures.

4.2 Is MacArthur's Theory of Change still plausible in the Lower Mekong?

The Theory of Change remains relevant, but insufficient to effect change in the face of limited political will. Greater emphasis is needed on addressing political will and on directly reducing threats to priority species and sites.

The majority of grantees agreed that MacArthur's Theory of Change remains plausible and relevant in the Lower Mekong. However, there was also a general feeling from grantees and the independent expert group that something is missing. As one person articulated, 'Understanding of the benefits of biodiversity by stakeholders is necessary, but not sufficient, to lead to direct conservation action. People also need to understand and use legal and campaign strategies to reduce pressures on high biodiversity landscapes, slow current trends of degradation and ecosystem service loss, and eventually reverse them.'

The main challenge is that local successes are often undermined by the short-term interests of powerful people (e.g., in business or government), who often have a stake in large-scale development proceeding, and not necessarily limited understanding. Political will is often lacking to override these short-term interests in favor of the longer-term interests of society. Most governments in the region see rapid economic development, rather than reliance on natural capital, as an existential issue. This is not a situation unique to the Mekong but is exacerbated there by limited government and corporate transparency and accountability. Fortunately both of these limitations are decreasing. We note again the significant potential for MacArthur to extend its partners to include those concerned with development and human rights, and thus increase an alliance for sustainable growth against powerful short-term interests.

We agree that the Theory of Change needs a stronger focus on addressing political will. We recognize that this would often require MacArthur to fund grantees which are well adapted to coping with or working around situations of low political will, rather than aiming to change it outright. A number of concrete suggestions for increasing political support for conservation, such as identifying and supporting "champions" in the government and engaging with the private sector, were made at the March 2015 grantee workshop (Appendix H).

As grantees and independent experts identify, longer-term policy and education efforts need to be complemented by shorter-term actions to directly address pressing threats to species and sites. In particular, we feel that greater attention is needed to combating wildlife trade; using political

alliances to challenge powerful vested interests; publicly exposing those who abuse power; and holding firm on protected area conservation. The importance of MacArthur's continued investment in site and species conservation was strongly reinforced at the grantee workshop. On wildlife trade, we recommend that MacArthur hold detailed discussions with CEPF, USAID and regional experts to learn which strategies have been successful, what has not worked, and where a relatively small amount of additional investment might make a difference.

As illustrated in the CEPF Ecosystem Profile⁵, the extinction of the Javan Rhinoceros from Vietnam is a cautionary tale of the need for a stronger and earlier focus on pressing threats on the ground, alongside support to politicians in higher-level decision-making. Relatively high conservation capacity in Vietnam - a country with solid protected area policies - meant that donors and NGOs paid inadequate attention to reduction of core threats. Significant investments were made in broader sustainable development (in largely ineffectual indirect efforts to try to reduce hunting), but direct actions such as law enforcement were not supported until too late. There was also a lack of political will to take tough decisions, such as on translocation of animals, that needed to be taken as the situation worsened⁶.

4.3 Were the assumptions underlying the Theory of Change correct?

These assumptions appear to have been valid, though limiting factors have included capacity to implement conservation and the level of political support for sustainable development.

There was general agreement among grantees that MacArthur's Theory of Change and the underlying assumptions are valid, but the relative support across the different assumptions is revealing (Figure 2). There was considerably less agreement with the following statements:

1. *Mekong governments do not completely repress community participation in decisions involving large-scale development and infrastructure projects*
2. *Companies involved in agro-industrial plantation are willing to engage civil society in improving CSR policies and programs.*
3. *Ecosystems and the ecological processes that produce benefits for society can be understood sufficiently to value and then manage for them*
4. *Sufficient capacity exists in potential grantees to conduct rigorous policy analysis and resource valuation studies*
5. *Mekong governments do not completely suppress ongoing land registration efforts with rural and Indigenous communities*

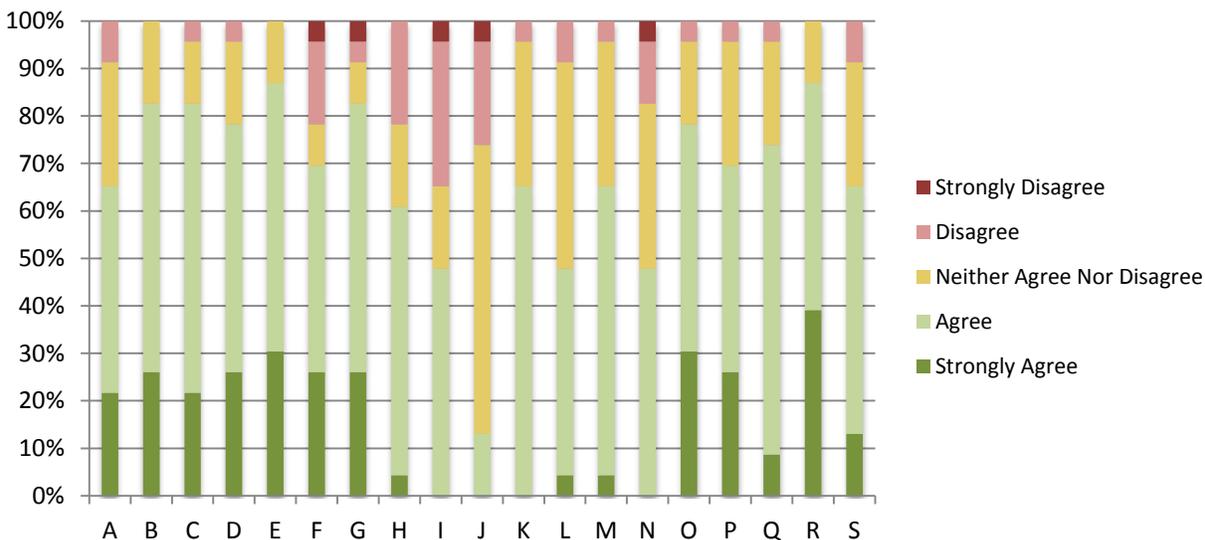
Conversely, there was considerably stronger agreement with the following assumptions:

6. *Existing models for developing future conservation leaders can be scaled up*
7. *Existing models for community conserved areas (CCAs), community forestry, and/or community fisheries can be scaled up*
8. *Civil society can monitor the status/trends in the health of ecosystems, pressures on them, and the effectiveness of conservation responses with scientific rigor and share this information with a broad audience.*

⁵ http://www.cepf.net/SiteCollectionDocuments/indo_burma/IndoBurma_ecosystemprofile_2011_update.pdf

⁶ Brook *et al.* (2014) Lessons learned from the loss of a flagship: The extinction of the Javan rhinoceros *Rhinoceros sondaicus* from Vietnam. *Biological Conservation* 174.

Figure 2. Grantee assessment of whether the assumptions underlying MacArthur's grant-making in the Lower Mekong are still valid (No. respondents=23)



- A. Civil society can describe the importance of high biodiversity ecosystems to sustainable economic growth persuasively to key decision makers.
- B. Civil society can illustrate ways to generate positive incentives for environmental stewardship at the highest priority sites and landscapes.
- C. Civil society can strengthen resource use rights of local communities and Indigenous Peoples who manage many of the high biodiversity ecosystems that provide benefits to others in society.
- D. Civil society can contribute to testing and evaluating policies that distribute the costs and benefits of ecosystem management efficiently and more equitably among the users and providers of ecosystem services.
- E. Civil society can monitor the status/trends in the health of ecosystems, pressures on them, and the effectiveness of conservation responses with scientific rigor and share this information with a broad audience.
- F. Ecosystems and the ecological processes that produce benefits for society can be understood sufficiently to value and then manage for them.
- G. Some ecosystem benefits – both economic and non-economic – are sufficiently valuable to be prioritized by society in resource use decisions.
- H. Sufficient capacity exists in potential grantees to conduct rigorous policy analysis and resource valuation studies.
- I. Mekong governments do not completely repress community participation in decisions involving large-scale development and infrastructure projects.
- J. Companies involved in agro-industrial plantation are willing to engage civil society in improving CSR policies and programs.
- K. Mekong governments continue to allow some media coverage of issues related to development, resource degradation, and affected communities.
- L. Sufficient capacity exists in potential grantees to support the design and implementation of PES approaches.
- M. Innovative approaches to site-based conservation will be supported by communities and government.
- N. Mekong governments do not completely suppress ongoing land registration efforts with rural and Indigenous communities.
- O. Existing models for community conserved areas (CCAs), community forestry, and/or community fisheries can be scaled up.
- P. Existing models for co-management mechanisms for formal protected areas can be scaled up.
- Q. A common standard for monitoring the impacts and effectiveness of conservation actions can be agreed by a diverse range of stakeholders.
- R. Existing models for developing future conservation leaders can be scaled up.
- S. Sufficient capacity exists in potential grantees to support the design and implementation of regional monitoring systems.

We interpret these responses as reflecting a broad concern among grantees over the limited willingness of governments in the region to support conservation efforts. Historically, the region's governments have been unwilling to listen to civil society. This situation has progressed least in Lao PDR, where civil society has very little access, followed by Vietnam, Cambodia and then Thailand. However, the weakening power of the region's nominally socialist governments (e.g. 46% vote

against the ruling party in Cambodia's 2013 election) and increased information flow (particularly owing to increased internet access, and development facilitating access to media) means that this situation is improving, most rapidly and notably recently in Vietnam.

Grantees were more confident about their capacity in monitoring, but we suspect there are significant challenges to monitoring at a level which can provide meaningful information on impacts (Appendix J).

Interestingly, grantees had some doubts about their collective implementation capacity, specifically to conduct rigorous policy analysis or design PES approaches. This understanding of capacity gaps is likely to be the driver for strong agreement with the need and opportunity for developing future conservation leaders, including within government ministries, and community conservation. It appears that grantees are looking to building capacity in national conservation organizations and local communities as a response to lack of support from government and doubts over current civil society capacity. Certainly, there was a lot of agreement that community-led conservation is poised to achieve meaningful outcomes, probably because of major advances in community voices reaching government in Cambodia, where most in-region grantees are based.

In conclusion, we believe that most initial assumptions were valid. The most notable exception has been the level of political support for conservation, but capacity to implement conservation has also been more limited than was initially assumed.

4.4 Has there been progress towards MacArthur's medium- and long-term objectives?

Against a challenging backdrop, some significant progress has been made. It remains difficult to influence large-scale infrastructure projects – this will require intensive engagement with Chinese, and other international, investors and companies

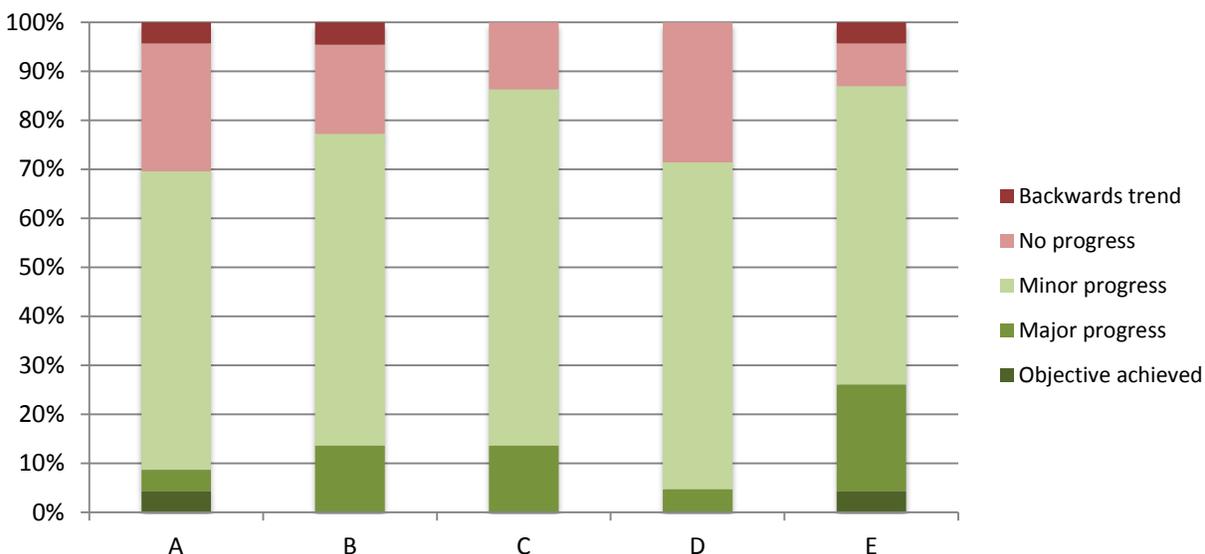
MacArthur defined five medium-term objectives (intermediate outcomes, A-E as listed in Figure 3 below) and a large set of three-year targets to track progress towards achieving these objectives (Appendix J.3). To evaluate progress towards these objectives, we solicited input from grantees through the online survey and interviews, reviewed grant reports and used documents provided by MacArthur to understand how grants in the Lower Mekong portfolio align to the 3-year targets that have been set to track progress against these objectives. In the current portfolio, MacArthur is funding projects to address almost all of the 3-year targets, but some targets are receiving more investment than others.

There was broad grantee support for the relevance of all five medium-term objectives and most grantees felt that at least minor progress had been made on all them (Figure 3). The greatest progress was reported on '*Understanding is increased of the contribution of conservation action to human well-being.*' On the other hand, a third of grantees believed that no progress has been made or even regression has occurred on '*Reflecting the importance of biodiversity in national development strategies*' and '*Increased financing for natural resource management,*' noting that, except for Thailand, government budgets for protected area systems remain wholly inadequate.

We agree that there has been significant progress made during this very short investment (Figure 4), albeit against a background of biodiversity decline. MacArthur has helped to strengthen the voice of civil society in relation to large-scale developments (Box 1), and its long-term investment in priority key biodiversity areas is paying significant dividends through the creation of new protected forests and the cancellation and reduction of economic land concessions (Box 2).

Progress has been made in shaping the debate around large-scale development through support to the compilation and publication of information on the impacts of hydropower dams, expansion of industrial agriculture (Box 4), and other infrastructure. Of particular note is the recent decision by the ADB to cancel funding for a planned road through the Tonle Sap floodplain, a direct result of the work of MacArthur grantees (Box 5).

Figure 3. Grantee assessment of progress towards MacArthur's medium-term objectives (No. respondents=23)



- A. The contribution of high biodiversity ecosystems to economic growth and food/water security is reflected in national development strategies, particularly investment in agriculture and infrastructure, and national accounting systems
- B. Policies that support widespread adoption of conservation incentive programs, such as payments for ecosystem services (PES), are developed and implemented in high priority sites and landscapes
- C. Sites of particular importance for biodiversity and ecosystem services are safeguarded more effectively using decentralized and/or traditional resource management
- D. Financing is increased for protected area systems, sustainable forestry programs, fisheries management, and ecosystem-based adaptation to climate change
- E. Understanding is increased of the contribution of conservation action to human well being

MacArthur is experimenting with different approaches to the safeguarding of targeted sites and landscapes by expanding economic incentives for conservation such as nest protection and snare removal for globally threatened species. Grantees have capitalized on the Cambodian government's cancellation of the fishing lots on the Tonle Sap, which granted private licenses for commercial fishing, to build local community rights and capacity to manage natural resources. Appendix F highlights additional examples of progress towards MacArthur's medium-term objectives.

Areas that appear underfunded, or where relatively less progress has been made, include establishing community conservation areas, proposing a common regional monitoring standard and establishing PES policies in priority landscapes. No grants were made against the target "PES policies developed in at least 1 landscape" due to a lack of suitable proposals. There is overlap between the targets on establishing community conservation areas and strengthening resource use rights of local communities in KBAs, so it is possible that progress towards the former has actually been higher than identified here. Finally, the delay between grant approval and first payment

means that some projects are still in their first year or starting their second year, indicating that additional progress towards some targets is likely.

Progress towards MacArthur's long-term objective was difficult to evaluate, given that post-baseline data for the Dashboard indicators will not be available until later in 2015 and 2016. Preliminary data suggest that the indicators will show an increase in at least nominal protection of key biodiversity areas across the region. However, given global trends of species decline and escalating threats⁷, we expect that the rate of deforestation and extinction risk of globally threatened species will also have increased. It is unclear how responsive the freshwater flow index will be to mainstream dam construction. Regardless, it will be critical to evaluate the trends for all indicators relative to anticipated baseline in the absence of conservation⁸. Without the investment of MacArthur and its donor partners, we have no doubt that trends would have been worse.

Box 4. Investigative report prompts action by Vietnamese rubber companies

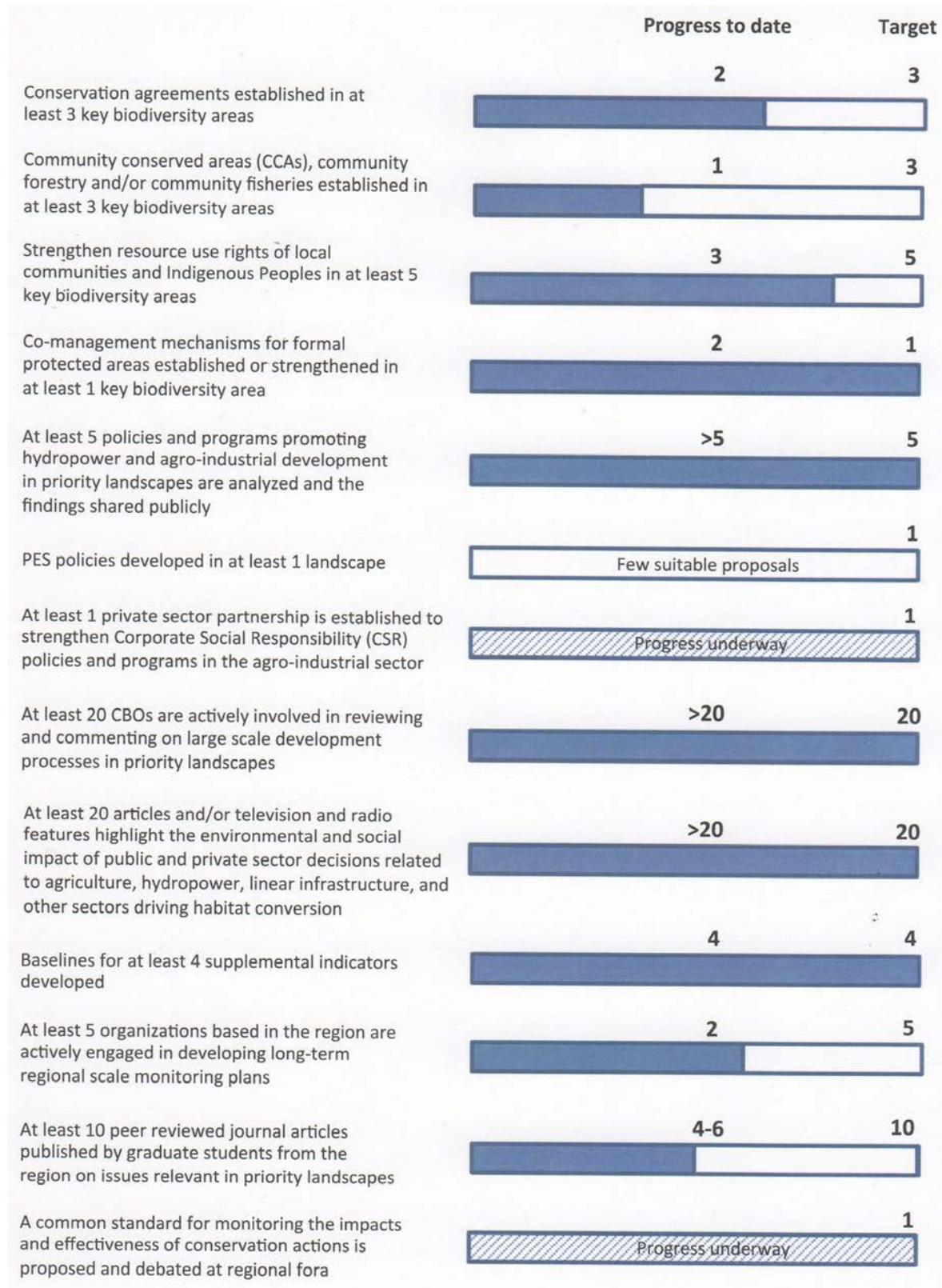
Economic land concessions are long-term leases of state land that allow for the development of industrial agriculture. By the end of 2012, the Cambodian government had leased 2.6 million hectares of land, nearly half of this for rubber. An investigative report published by MacArthur grantee Global Witness revealed that two of Vietnam's largest companies, Hoang Anh Gia Lai (HAGL) and the Vietnam Rubber Group (VRG), had gained the rights to land concessions totaling five and sixteen times the legal limit, respectively. This report, *Rubber Barons*⁹, published in 2013, also revealed that much of this land had been stripped from local communities, intact forest adjacent to concessions was being illegally felled, and some of the concessions were being used to launder the illegally-cut timber. Both rubber companies receive financing from international investors with environmental and social safeguards, notably the International Finance Corporation (IFC). The publication of *Rubber Barons* generated much negative publicity for the companies and their financiers and prompted them to take limited, but significant, action. In 2014, HAGL confirmed that it would comply with the dispute resolution process led by the Office of the Compliance Advisor following submission of a formal complaint to the IFC by communities in Cambodia. VRG launched its own complaints mechanism across its twenty-one plantations in Cambodia and Laos, which commits the company to addressing issues raised within 30 days. Most recently, following a complaint submitted by Global Witness, the Forest Stewardship Council (FSC) launched an investigation into VRG, which holds FSC certification for its plantations in Vietnam.

⁷ Butchart *et al.* (2010) Global biodiversity: indicators of recent declines. *Science* 328.

⁸ Hoffmann *et al.* (2010) The impact of conservation on the status of the world's vertebrates. *Science* 330.

⁹ <http://www.globalwitness.org/rubberbarons>

Figure 4. Progress towards MacArthur’s medium-term objectives and 3-year targets in the Lower Mekong



4.5 Are the targets and indicators being used to track progress the best ones to enable evaluation of impact?

MacArthur’s long-term targets and indicators appear to be largely appropriate, but there is a need for clear logical linkage between medium- and long-term targets and objectives, and to the data gathered to track progress. The Dashboard would benefit from supplementary indicators at spatially and temporally finer scales.

4.5.1 Long-term objective, targets and indicators

MacArthur’s 10-year outcome, or long-term objective, is that *Current rates of biodiversity and natural habitat loss are reduced and ecosystem benefits are sustained by conserving priority sites and implementing appropriate policies in high biodiversity landscapes*. This and the four 10-year targets that MacArthur has adopted to track progress towards achieving this outcome are a subset of the Aichi biodiversity Targets¹⁰. MacArthur is clear that these targets are for the conservation community as a whole and that it cannot achieve them on its own, but is also keen to understand the contribution of its investments to these targets. With Foundation support, NatureServe has developed baselines for four core Dashboard indicators that are intended to measure progress towards these targets (Table 2). Through this evaluation, MacArthur is interested in understanding whether these targets and indicators are the best ones to enable evaluation of impact.

Table 2. 10-year outcome and targets in the Lower Mekong, and related Dashboard indicators

10-year outcome	10-year targets	Dashboard indicators
Current rates of biodiversity and natural habitat loss are reduced and ecosystem benefits are sustained by conserving priority sites and implementing appropriate policies in high biodiversity landscapes	Ecosystems services, particularly services related to water and fisheries, which contribute to health, livelihoods and well-being, are sustained	Hydrological flows from natural ecosystems (Freshwater flow index to downstream human populations)
	The extinction of known threatened species is prevented, particularly those most in decline	Changes in the risk of extinction to globally threatened species (Red List Index)
	The rate of loss of natural habitats, including forests, is reduced and where feasible brought close to zero	Rate of deforestation
	At least 50 percent of priority sites for biodiversity and ecosystem services are under effective conservation management	Percentage of priority sites that have legal protection, including as community forests and/or indigenous reserves

Most grantees indicated that the 10-year targets are useful for tracking progress towards achieving the long-term desired outcome at a regional scale. However, respondents were generally unclear that MacArthur was not aiming to achieve these long-term outcomes and targets alone. Many grantees identified contributions of MacArthur to other Aichi Targets, such as reduced threats to ecosystems and landscapes (Targets 4 and 7), sustainable fisheries management (Target 6), and maintained habitat quality (part of Target 5), and suggested that it may be useful to explicitly recognize these contributions.

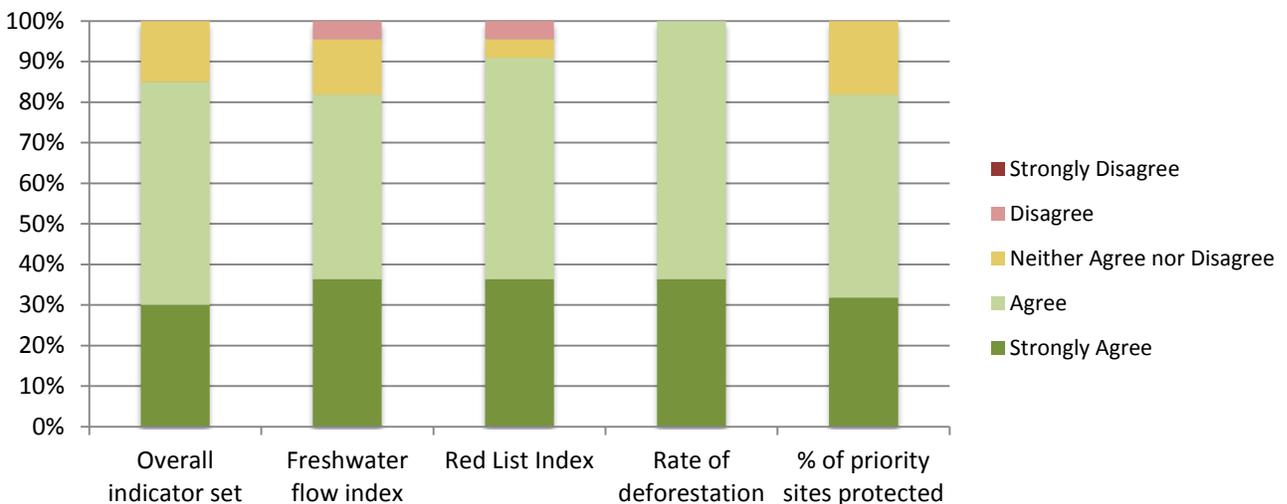
There was substantial grantee support for all four Dashboard indicators (Figure 5), though concerns were expressed by some about finding the right balance between the amount of money

¹⁰ Established by the Parties to the Convention on Biological Diversity in 2010: <http://www.cbd.int/sp/targets>

spent on monitoring ecosystem decline and that spent on preventing it. Concerns were also raised about the short-term responsiveness of all of the indicators, particularly the Red List Index. Independent experts raised particular concern that rate of deforestation will not capture changes in wetlands and grasslands, which represent a significant portion of MacArthur’s geographic focal area. They noted that, to track relevant habitat loss, this indicator will need to be broadened.

There was strong grantee support for the adoption of supplementary indicators. The most useful indicators were stated to be those more relevant to local people, and thus perhaps to government, such as ecosystem services indicators (particularly related to fish catch). Other priorities included indicators for implementation of legal frameworks, development of local civil society capacity, and establishment of other enabling conditions (an area where MacArthur could learn from CEPF’s significant advances).

Figure 5. Grantee assessment of whether the Dashboard indicators are the best ones to enable evaluation of impact (No. respondents=22)



We share the concerns from grantees about the coarse spatial and temporal resolution of most Dashboard indicators and agree it is important that they are supplemented by more responsive indicators – notably faster-reacting pressure indicators. Appendix I lists the full set of potential supplementary indicators suggested by grantees, and highlights those that we feel offer most potential. NatureServe has already taken these recommendations on board and is starting to incorporate additional indicators.

For clarity, we also recommend that MacArthur-specific long-term targets and outcomes be established to represent an achievable niche for the Foundation within the Aichi Targets (similar recommendations were made by a previous CSD-wide evaluation).

4.5.2 Medium-term objectives and targets

As discussed earlier, MacArthur’s evaluation framework includes a set of medium-term objectives and 3-year targets that are more directly related to its own investments. Figure 4 shows that a number of these targets have already been achieved or even exceeded, and that most of the remainder are on track to be met by the end of the 3-year grant cycle. This indicates that many 3-year targets may be too easily achieved – either because they are too open to interpretation or

insufficiently ambitious. Moreover, at present the 3-year targets do not always logically lead to desired 3-year objectives, and have some important gaps. As an extension of this, the link between medium-term and long-term objectives and objectives is not sufficiently clear. These points were also raised during the March 2015 grantee meeting (Appendix H). We recommend that MacArthur give more attention to identifying 3-year targets that better align with its objectives. We elaborate these points and make recommendations for the Work Plan logframe in Appendix J.

4.5.3 Clarifying MacArthur's aims for monitoring

Monitoring and evaluation is one of the most challenging areas of biodiversity conservation grant-making. Like MacArthur, other biodiversity conservation donors (e.g., Global Environment Facility, CEPF) are making significant investments to monitor the impact of their grant-making, but all are struggling to find appropriate, effective approaches. The trend has been toward more quantitative, rigorous and often more expensive analysis using counterfactual datasets, such as forest cover or species population trends, in sites receiving investment versus no investment. Because the Dashboard indicators *per se* are too coarse to allow for evaluating the impact of a single foundation or even a consortium of donors, work is underway to expand the Dashboard to include counterfactual analyses of forest cover and other indicators.

We applaud MacArthur for experimenting with such ambitious monitoring approaches. Certainly, conservation would be revolutionized if economical approaches were found to monitoring impact of investments. However, our experience – and feedback from grantees and independent experts – suggests that robust counterfactual analysis and impact monitoring are unlikely to often be realistically possible for biodiversity conservation (cf. other fields such as human development) in a cost-effective way. A similar conclusion was drawn by a full CSD evaluation in 2010. We have not had time to comprehensively investigate the issue during this evaluation, and it is a target for further assessment under a full CSD evaluation in 2015, but we tentatively suggest that there are three main levels at which MacArthur is likely to want to monitor change:

- **'Detailed impact monitoring': to influence management/investment decisions --** Scientifically robust but typically complex and expensive, detailed impact monitoring will generally best be reserved for a very few individual projects with experimental approaches to conservation, in order to evaluate whether to continue such approaches. For example, bird population trend monitoring that is conducted during nest protection by MacArthur grantees.
- **'Broad understanding of progress': to demonstrate value of investments --** To obtain a broad understanding of the conservation progress made with donor investments, a simple yet flexible system is preferable, which evaluates diverse pressure/state/response/benefits data – including across suites of monitored sites (e.g. comparing invested sites to non-invested sites, or use of multi-variate analysis). A combination of current expert evaluations (such as this one), and more objective data collection and analysis, would be ideal. Counterfactual analyses from the Dashboard also have high potential to contribute here, but likely at significant expense.
- **'Big picture context': to help put grant-making progress (or apparent lack of) in perspective --** To clarify the relative gains (or, more often, reductions in losses) that grant-making has achieved against the widespread context of biodiversity decline, the NatureServe Dashboard indicators can be used to understand national- or regional-scale trends in biodiversity and how they are changing over time.

We feel that MacArthur is on track to put in place such a system, but has not yet clearly outlined its aims for monitoring and plans for achieving those aims. As such, methods are not yet finely honed to needs. In particular, we believe that the mid-level ('broad understanding of progress') would benefit from clearer definition and thus closer examination of objectives, targets, methods for

portfolio evaluation, the challenges of contributions from the Dashboard, and the potential for alternative approaches. Close comparison with CEPF monitoring frameworks is likely to be very instructive. We recommend MacArthur also closely watch GEF's development of counterfactual assessment, though it may be at a level unachievable for the Foundation. We elaborate these points and make recommendations for the monitoring framework and Work Plan logframe in Appendix J.

4.6 Are the “clusters” of science, policy and site-based conservation still relevant?

The focal areas of science, policy and site-based conservation remain relevant and interdependent. Greater attention is needed to ensuring science is appropriately designed, targeted and succeeds in influencing decision-makers.

MacArthur grants in the Lower Mekong can be clustered broadly into those focused on science, policy and site-based conservation. The focus on policy in the MacArthur portfolio received slightly stronger support from grantees than science or site-based conservation (Figure 6), but grantees also indicated separately that there is potential to scale up community conservation on the ground. A number of respondents highlighted that the three focal areas are not only necessary but interdependent. Both science and experience gained in site-based conservation are necessary to inform good policy, while policy advances are essential to the success of site-based conservation. As noted earlier, many grantees reported that the Lower Mekong countries have good policies in place, but that implementation remains weak or non-existent, and see governance as an area needing increased attention.

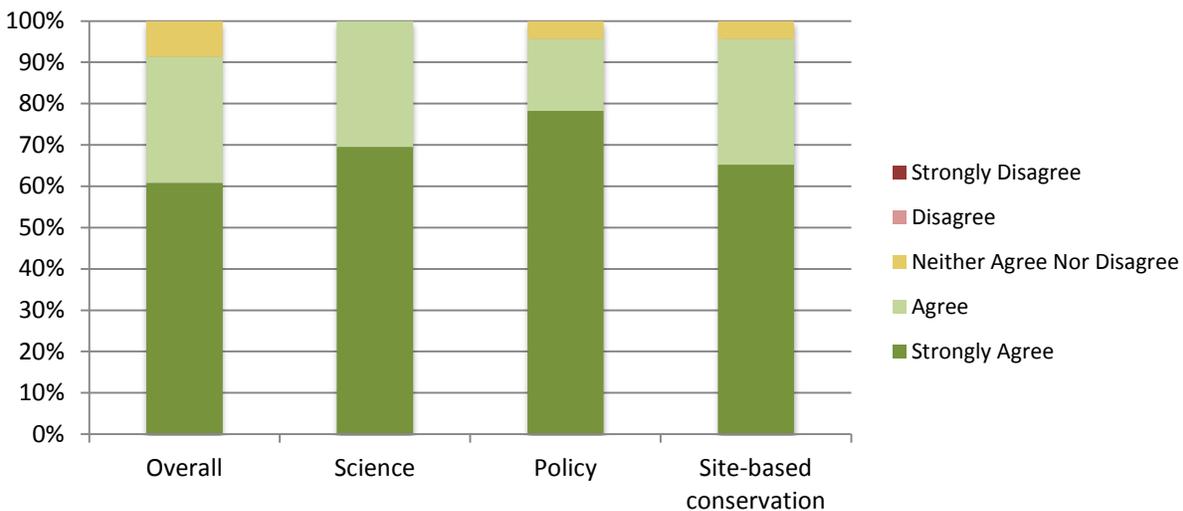
Because policy work is often slow to pay off and threats to biodiversity are increasing rapidly, many interviewees emphasized the importance of MacArthur maintaining support to site-based conservation. This point was reinforced further at the March 2015 grantee workshop (Appendix H), where our recommendation (Section 1) to “Directly safeguard priority key biodiversity areas and threatened species...” received the strongest support.

A number of interviewees, however, considered science (apparently referring to science throughout the portfolio, rather than the ‘science focal area’ specifically) to be very important, but ineffective if poorly communicated. Several drew parallels with the research conducted through the Mekong River Commission, much of which has not been incorporated into policy because the results are too technical. Interviewees suggested that science works best when it is well-targeted with a clear audience in mind; is at an appropriate technical level for audiences; answers questions that have been framed with the participation of decision-makers and policy-makers; involves local scientists, NGOs, communities and other key stakeholders, and thus can be understood and communicated by them; is published in local languages; is simplified and summarized for decision-makers and the media; and includes a focus on economic trade-offs. Research on natural capital valuation was offered as a specific example, particularly if finer scale data existed on the value of individual ecosystem services at particular sites. As non-economic arguments were seen as having only limited value in tackling reasoning based on economic development. A key conclusion of the March 2015 grantee workshop was that involvement of key stakeholders (government, communities, etc.) from the earliest stage – including project design and establishment of research questions – was crucial to uptake of project results (Appendix H).

The independent expert group and other grantees noted, however, that limited political will means that even the best-communicated science may not influence governments in the region. These respondents suggested that a greater focus on media and advocacy campaigns would best influence

Lower Mekong governments to reduce impacts on natural ecosystems. Alternately, an approach that has sometimes been more effective than – or strongly supported – scientific research elsewhere is study visits for decision-makers to similar, previously-affected countries to discuss issues with peers. Grantees and independent experts also noted that great leverage could be gained from working more closely with the media and sharing results of scientific studies with journalists and others who can digest and interpret science for decision-makers. As MacArthur-funded work by PanNature in Vietnam demonstrates, journalists are often eager for material to publish. Finally, there is a need to greatly strengthen the capacity-building components of science grants, such as through an exchange program for local graduate students.

Figure 6. Grantee assessment of whether MacArthur’s focus on science, policy and site-based conservation is still relevant (No. respondents=23)



Science -- Better understand the ecology of the aquatic ecosystems of the lower Mekong; quantify the impacts of hydropower, large-scale agriculture development, and climate change on the ecosystem
 Policy -- Shift the policy and practices driving hydropower development, mining, and large-scale agriculture in ways that reduce pressure on natural ecosystems
 Site-based conservation -- Experiment with approaches to site based conservation that rely upon direct incentives for individuals and communities to act as stewards of priority sites

We agree with grantees that a much more concerted effort needs to be made to increase local participation in, and improve the communication of, research and its implications. Some of the science funded by MacArthur is highly complex, involving cutting edge data collection and analytical methods. While its scientific value is not in question, it may not be at the most appropriate level to effect change, and the intended outlet for some of this work beyond the peer-reviewed literature is not clear. We recommend clarifying the specific policy processes and/or decision-makers that the science aims to influence. Similar conclusions were reached by a CEPF Indo-Burma assessment report in 2014. For example, in Cambodia, early engagement of the Technical Working Groups (e.g. on Forestry and Fisheries) of the Government-Donor Coordination Committee, to formulate appropriate research questions, is key to ensuring that science is relevant to – and accepted by – relevant ministries. This strategy was successfully used by MacArthur grantees to oppose the controversial Asian Development Bank-funded road project across the Tonle Sap floodplain (Box 5).

Overall, investment in science may currently be disproportionately large given its relatively limited influence on desired outcomes in the region. However, we feel that ultimately the only credible

approach is to ensure that donor investments maintain a scientific basis, that is policy-relevant and addresses the recommendations outlined in this evaluation.

Box 5. Biodiversity and economic data in hand, ADB cancels funding for Tonle Sap road

The Ministry of Public Works in Cambodia proposed to build a new road to increase tourism in Battambang, Cambodia's second largest city, with financing from the Asian Development Bank (ADB). The road would decrease the 4-hour journey from Siem Reap to Battambang by 1-1.5 hours and connect to a road providing access to the coast. All three routes proposed for the road would bisect the most ecologically sensitive zone of the Tonle Sap floodplain, and the design would require a series of viaducts at a cost of USD \$90-150 million. MacArthur grantees WCS and CI prepared a science brief outlining the consequences of the proposed road, including extensive loss of flooded forest and scrubland habitat and damage to three fisheries conservation areas, nine community fisheries, and several globally-significant key biodiversity areas. The science brief focused on ecological impacts but was presented in economic terms. It argued that the potential tourism benefits of the new road would not outweigh the high cost of road construction and maintenance and the millions of dollars in estimated losses from community fisheries. It further contended that it would make better economic sense to upgrade existing roads. WCS and CI submitted the science brief to the Technical Working Group on Fisheries, where it was formally adopted as a policy brief and sent to ADB in 2014. At a meeting to review its investments in the Mekong region in January 2015, ADB issued a decision to cancel funding for the new road.

4.7 Are the grants in the portfolio complementary and mutually reinforcing?

Portfolio grants appear to have been well chosen to offer potential for complementarity. In the future, increased focus on promotion of synergies among grantees and among portfolios and programs would add great value.

MacArthur selected projects for its Lower Mekong portfolio from a large pool of potential applicants (120 letters of inquiry) to fill gaps in knowledge and practical experience. Some of the grants were specifically designed to complement and reinforce each other, such as the science-policy group, whereby five individual grants made to Boston University, University of Canterbury, Inland Fisheries Research and Development Institute (IFReDI), Conservation International (CI), and the University of Washington are components of a single larger strategy to understand the impacts of large-scale development in the Lower Mekong and so adapt underlying policies and practices to reduce pressure on ecosystems and dependent communities. The projects are in early phases of implementation, but have high potential to be reinforcing. For example, CI, as a member of the Technical Working Group on Fisheries, and IFReDI, a research arm of the Fisheries Administration, are well positioned to help feed the science produced by the three universities into relevant policy processes in Cambodia and – given the opportunity – to help shape appropriate research questions.

Another example of complementary grant-making is the work of EarthRights International, International Rivers, and Living River Siam to address the legal, advocacy and community engagement aspects, respectively, of hydropower development of the Mekong River. The collaboration between these organizations pre-dates MacArthur funding, but grantees indicated that the new investment by the Foundation has strengthened their collective efforts.

Outside these two examples, however, grantees were generally unaware of other organizations that were receiving MacArthur funding for thematically or geographically similar work in the Lower Mekong. This disconnect seemed greatest between conservation NGOs and organizations specializing in human development, indigenous and community rights, and regional security. Thus, there is still considerable potential for greater interaction among grants in the Lower Mekong portfolio in the next round of grant-making. For example, enormously synergistic outcomes could

emerge from tightly linking the policy work of the Stimson Center (which has connections to high-level decision-makers) to science investments that are generating data on alternative development scenarios but struggling to reach key audiences. More broadly, useful links might be drawn to other MacArthur portfolios or programs, including those addressing Chinese resource use or UNEP-WCMC work to predict future threats from commodities trends. Coordination among grantees could be simply assisted by explanation of how grants in the portfolio fit together and align with medium-term objectives, accompanied by grant summaries and contact information. As detailed in Appendix H, mapping of corporate engagement across the portfolio would help grantees trying to leverage the private sector to identify opportunities, share information and collaborate. In future, networking opportunities such as the March 2015 workshop, with all MacArthur (and other donor) grantees present, might also be considered earlier in funding rounds.

4.8 Is the interaction among donors complementary and mutually reinforcing?

Coordination with other donors appears to have increased MacArthur's efficiency but could be extended further, both to areas such as monitoring and to other partners: alliance with social- and development-focused donors could particularly help to leverage success.

The interaction between the four donor partners – MacArthur, CEPF, Margaret A. Cargill, and McKnight – appears to have been very productive, and was praised by all partners. By investing in the development of the CEPF Ecosystem Profile, the four donors developed an ambitious joint strategy that could serve as the basis for complementary and mutually reinforcing grant-making. It was beyond the scope of this evaluation to review the grants made by the three other donor partners. However, based on short descriptions of these grants, it appears there is significant potential for them to be complementary and mutually reinforcing to those in the MacArthur portfolio. A number of MacArthur's grants are co-financed by CEPF or Margaret A. Cargill. Regular joint meetings, where grantees of the different donors can share their work, would be an excellent opportunity to better link grantees engaged in similar or related work. A meeting along these lines in March 2015 is a very positive step towards encouraging such collaboration.

Following the development of the CEPF Ecosystem Profile, through a process of negotiation the four donors divided up the strategic directions to ensure that all were covered. Although CEPF had the broadest niche among the four donors in the strategic directions it could fund, MacArthur's flexibility was noted by the other donor partners and allowed for a greater number and diversity of projects to be funded overall. For example, MacArthur handed over its long-supported Fauna & Flora International-Royal University of Phnom Penh capacity building project to Margaret A. Cargill and supported fewer site-based projects, because these fit well with the latter's priorities, freeing up resources for MacArthur to invest more heavily in policy than it has done previously.

Despite the collaborative approach to grant-making, all donors noted that the collective portfolio remains insufficient to tackle all threats to biodiversity. According to both donors and independent regional experts, a particular gap that has emerged is in the area of wildlife trade. MacArthur did not invest in this strategic direction, because CEPF planned major investments. However, CEPF has learned important lessons (see final Indo-Burma assessment report, 2014), including that the need now far outweighs the supply of available grant resources. Another gap noted by many respondents was capacity building in conservation at the post-graduate and early career levels in countries other than Cambodia, particularly sustained mentoring of promising individuals.

The donors all agreed that the benefits of funding a joint strategy have outweighed the transaction costs that come with a partnership of this complexity. They collectively support and learn from each other. The partnership has had immediate and tangible benefits and serves as a good example of donor collaboration for other regions. Going forward, the donors have questions about how they can collaborate on monitoring; how to make the interface between funders and applicants as seamless as possible (e.g. through shared calls for proposals or proposal formats); how much to formalize their relationship; and whether the region is ready for a larger network approach to grant-making that includes funders and non-profits across sectors¹¹.

We see considerable opportunity for the four donor partners to collaborate on monitoring at the regional scale, to understand the changing context and gain a broad understanding of the conservation progress that has been made with donor investment. For example, CEPF is making forest change monitoring investments globally that may overlap with aspects of the Dashboard. MacArthur's potential role in leading coordination of its regional donors on monitoring was reinforced at the March 2015 workshop (Appendix H).

Opportunities also exist for MacArthur to engage with and complement the investments of other major donors in the region, such as the European Union (EU). Engagement with more development-focused donors may offer greater opportunities to influence high-level decisions that impact biodiversity. Specialist partners may also be desirable for particular issues, such as engagement of Chinese investors in the region – for example, the Blue Moon Fund has great experience in China and interest in south-east Asia.

4.9 Are the underlying conditions being established to sustain or ensure MacArthur's long-term outcome?

Good policies are in place, but policy implementation has been weak – largely owing to limited local leadership and capacity, as well as the lack of long-term financing.

The underlying conditions necessary to sustain or ensure MacArthur's long-term outcome in the Lower Mekong particularly comprise supporting policies, local leadership and capacity, and long-term financing. Annex 4 of the CEPF Indo-Burma final assessment report (2014) notes that very limited progress has been made in long-term financing, and details some minor progress that has been made in civil society capacity and government policy.

Most interviewees felt that the Lower Mekong countries have good policies in place but that implementation is weak. For example, Cambodia adopted a national policy and strategic plan for green growth in March 2013 and established a green growth authority, but technical and financial support is lacking to implement the priority projects called for in the 2013-2030 strategic plan. Even more than resources, political will is perceived as lacking in Lao PDR and Cambodia to implement existing policies due to vested financial interests of the political elite. There have been encouraging signs in Cambodia, however, where some recent government policy has supported communities. Community protected areas and fisheries are being created, and the government is resolving an increasing number of land dispute cases. A new EIA law is currently being written in Cambodia, and EIA guidelines for oil, gas and mining have been developed.

Grantees and independent experts identified a critical need for more local leadership and capacity, particularly within government, and a key role for MacArthur in strengthening that capacity. For

¹¹ RE-AMP (<http://www.reamp.org>) is an example of a network approach to grant-making in the U.S.

example, from a purely academic point of view, in Cambodia the amount of research carried out by nationals is low and expertise is lacking, particularly in economics. Another capacity gap identified by grantees was in demonstrating which models for community conservation are effective in achieving both conservation goals and increased community benefits. We – and the expert group – see a regional gap in capacity across many conservation skill areas, although this of course varies by country (Section 4.3).

Financial investment by most Mekong governments in conservation and protected area management remains inadequate, in line with global trends¹². With the exception of Thailand, NGOs play a major role in the maintenance of protected areas because there is limited budgetary or political interest in doing so by governments. Most grantees indicated that minor progress has been made in increasing financing for protected area systems, sustainable forestry programs, fisheries management, and ecosystem-based adaptation to climate change, largely because of increased resources by private foundations and development agencies. For example, the EU is planning a 100 million euro investment to support agriculture and natural resource management in Cambodia. Support to the Fisheries Administration under the EU initiative will focus on capture fisheries, community fisheries support, grass roots activities and increasing capacity of communities to participate in policy dialogue. Opportunities exist for MacArthur to engage with and complement such future donor investments. The March 2015 grantee workshop highlighted the importance of piloting innovative financing schemes and suggested greater collaboration between donors to ensure long-term investment in the conservation of priority sites (Appendix H).

Overall, we agree with grantee and other respondent consensus that good policies increasingly exist in the Mekong countries, but that implementation of those policies remains weak. Limited political will for conservation appears to be the underlying factor behind limited implementation (and behind the dearth of long-term financing for conservation), although capacity to implement policy has also clearly been a factor.

¹² Watson *et al.* (2014) The performance and potential of protected areas. *Nature* 515.

Appendices

A. Acknowledgements

B. Collective investments of MacArthur, CEPF, Margaret A. Cargill and McKnight in the Lower Mekong

C. MacArthur grants in Lower Mekong and related portfolios (Upper Mekong, Region-wide Mekong and Global China Footprint) not reviewed for this evaluation

D. Evaluation methods

E. Results of the grantee questionnaire

F. Highlights of progress towards MacArthur's medium-term objectives and 3-year targets in the Lower Mekong

G. Summary of expert workshops, 4-5 January 2015, UK

H. Summary of grantee workshop, 5-6 March 2015, Cambodia

I. Annotated list of potential supplementary indicators for the Lower Mekong

J. Perspectives on monitoring, targets and objectives

Appendix A. Acknowledgements

The following individuals provided input into the evaluation through interviews, an online survey, the meeting of independent experts (Jan 2015), or the grantee workshop (Mar 2015).

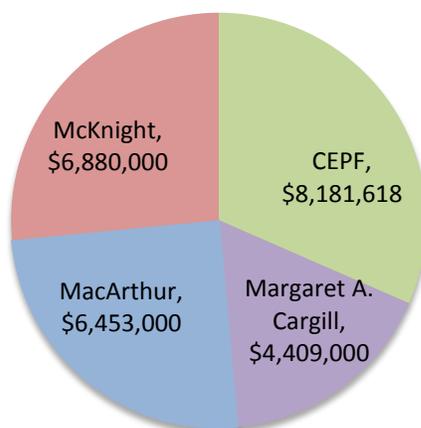
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Jane Maland Cady	McKnight Foundation
Stuart Chapman	WWF
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Richard Cronin	Stimson Center
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Tom Evans	Wildlife Conservation Society
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Healy Hamilton	NatureServe
Han Xuemei	NatureServe
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Gordon Holtgrieve	University of Washington
Christopher Holtz	MacArthur Foundation
Chantell Johnson	MacArthur Foundation
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Bridget Kennedy	Conservation International
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Keo Omaliss	Ministry of Agriculture and Forestry, Cambodia
Daniel King	EarthRights International
Lorang Yun	Indigenous Peoples Alliance
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Seak Sophat	Royal University Phnom Penh
Seng Teak	WWF
Thy Try	Open Development Cambodia
Tanya Wattanakorn	IUCN
Michael Wells	Michael Wells and Associates
Tony Whitten	Fauna and Flora International

Appendix B. Collective investments of MacArthur, CEPF, Margaret A. Cargill and McKnight in the Lower Mekong

MacArthur has coordinated its grant-making in the Lower Mekong with three other donors which are collectively investing across the strategic directions in the 2011 CEPF Ecosystem Profile. The pie chart below indicates investment by each donor as of Dec 2014; the CEPF total includes grants made to CEPF by both MacArthur (\$425,000) and Margaret A. Cargill (\$1.8 million).

Strategic Direction	MacArthur Foundation	Critical Ecosystem Partnership Fund (CEPF)	Margaret A. Cargill Foundation	McKnight Foundation
1. Safeguard priority species				
2. Demonstrate responses to illegal wildlife trade				
3. Strengthen protected area management effectiveness				
4. Empower communities to conserve priority sites				
5. Sustain and improve local livelihoods at priority sites				
6. Mainstream biodiversity in development planning				
7. Minimize the impacts of plantations and dams				
8. Strengthen the capacity of civil society				
9. Conduct education, training and awareness				
10. Evaluate impacts via systematic monitoring				
11. Provide leadership & coordination via an RIT				



Appendix C. MacArthur grants in Lower Mekong and related portfolios (Upper Mekong, Region-wide Mekong and Global China Footprint) not reviewed for this evaluation

Grants made in MacArthur’s Upper Mekong, Mekong Region-wide and Global China Footprint portfolios (listed below) are relevant to the Lower Mekong but were not reviewed because they were out of scope for this evaluation; these grants are currently the subject of a CSD program wide evaluation. In addition, four Lower Mekong grants were not reviewed because they were made prior to 2012, were renewed recently, or fell outside the Lower Mekong sub-region.

Grantee	Grant Purpose	Portfolio
BirdLife International	To improve the management of Western Siem Pang dry forest ecosystems in Northeast Cambodia (over four years).	Lower Mekong (grant renewal)
Boston University	To research environmental and developmental dimensions of China in Latin America (over two years).	Global - China Footprint
Chengdu Institute of Biology, Chinese Academy of Sciences	To improve understanding about the watershed benefits provided by high altitude grasslands in the headwaters of the Mekong (over three years).	Upper Mekong
China Dialogue Trust	To increase understanding about the environmental impacts of development policies in the Lancang basin in China (over three years).	Upper Mekong
Chinese Academy of Sciences, Kunming Institute of Botany	To identify and track indicators of ecosystem change and conservation effectiveness in the Upper Mekong basin (over three years).	Upper Mekong
College of William and Mary	To evaluate the impact of Chinese development finance and assistance in ecological hotspots.	Global - China Footprint
Conservation International	To update the Critical Ecosystem Partnership Fund Ecosystem Profile for Indo-Burma.	Region-wide Mekong
EarthRights International	To support the Save the Mekong Coalition (over one year).	Lower Mekong (grant ended 2012)
Fauna & Flora International	To integrate rangeland management and conservation on the Tibetan plateau (over three years).	Upper Mekong
Friends of the Earth	To strengthen civil society capacity to understand and respond to China’s overseas investment.	Global - China Footprint
Global Witness	To improve accountability for the impacts of agro-industrial development across the Mekong basin (over two years).	Region-wide Mekong
International Rivers Network	To address the global environmental impact of Chinese hydropower development (over two years).	Global - China Footprint
International Rivers Network	To address the global environmental impact of Chinese hydropower development (over two years).	Global - China Footprint
International Rivers Network	To support the Save the Mekong Coalition.	Lower Mekong (grant ended 2012)
International Rivers Network	To build a strong civil society movement to protect rivers and defend the rights of communities in the Mekong River Basin (over three years).	Region-wide Mekong

Natural Heritage Institute	To minimize the impact of hydropower on natural ecosystems in the Greater Mekong basin (over three years).	Region-wide Mekong
Peking University Center for Nature and Society	To identify and track indicators of ecosystem change and conservation effectiveness in the Upper Mekong basin (over three years).	Upper Mekong
Plateau Perspectives	To integrate rangeland management and conservation on the Tibetan plateau (over three years).	Upper Mekong
Shan Shui Conservation Center	To identify priorities for conservation investment in the headwaters of the Mekong.	Upper Mekong
Shan Shui Conservation Center	To mobilize civil society in the conservation and sustainable development of the Upper Mekong basin (over three years).	Upper Mekong
Stimson Center	To strengthen transboundary water resources management in the Greater Mekong basin (over two years).	Region-wide Mekong
Wildlife Conservation Society	To update the 2005 report, Myanmar: Investment Opportunities in Biodiversity Conservation.	Lower Mekong (Myanmar)
World Wildlife Fund	To design a multi-donor fund to reduce the adverse environmental and social impacts of China's overseas investments and trade (over eighteen months).	Global - China Footprint
Yunnan Academy of Forestry	To reduce the impact of planned hydropower development on natural ecosystems in the Upper Mekong basin (over three years).	Upper Mekong

Appendix D. Evaluation methods

Our approach to the Lower Mekong portfolio evaluation involved *understanding the portfolio context* through reviewing relevant documents and speaking with donor partners; *gathering data* from MacArthur grantees; *calibrating initial evaluation findings* through consultations with independent regional experts and CEPF grantees, and collaboration with UNEP-WCMC and NatureServe; *improving future evaluation ability* by cooperating with NatureServe to improve the Lower Mekong Dashboard; and *presenting results* in an evaluation report and to MacArthur directly.

Understanding the portfolio context

We first reviewed in detail all documents related to MacArthur Foundation's conservation investment in the region. These included the CSD Strategic Framework 2011-2020, the Lower Mekong Work Plan for 2012-2014, the Critical Ecosystem Partnership Fund's (CEPF) updated Ecosystem Profile, and the proposals and annual reports for the 22 MacArthur grantees.

As the MacArthur Foundation is one of several major donors to biodiversity conservation in the Lower Mekong, we interviewed the program leads of the Margaret A. Cargill Foundation, McKnight Foundation, and the Critical Ecosystem Partnership Fund to understand their portfolios and priorities.

We held extensive discussions with two of MacArthur's additional grantees, NatureServe and UNEP-WCMC, to determine how to leverage their work for the Lower Mekong evaluation.

Gathering data

At the time of this evaluation, most of the projects in the MacArthur Lower Mekong portfolio were in their second year of implementation. It was not possible to assess the conservation impact using the four core indicators in the Dashboard, because post-baseline data was not yet available and supplementary indicators have yet to be defined. Thus, we gathered information from MacArthur grantees through an online questionnaire and through in-person and phone interviews. The online survey was used to obtain a standardized set of information from each grantee and to target interview questions most efficiently.

We gathered information to assess whether:

- The theory of change and underlying assumptions still hold;
- Conservation prospects have changed significantly since 2011;
- Grant-making should be concentrated in the focal areas of policy, science, or site-based conservation;
- Progress is evident towards short, medium, long-term Work Plan objectives;
- Chosen monitoring indicators are appropriate for evaluating impact;
- Enabling conditions are being established to sustain conservation outcomes.

In addition to grantees, we interviewed other relevant regional biodiversity, socio-economic and policy experts including from ADB, USAID, and government agencies within the region. The purpose of these interviews was to better understand the current policy context in which the MacArthur portfolio is operating, the priorities of decision makers that may be constraining (or harnessed for) biodiversity conservation, and the data that are being relied upon for decision-making.

Calibrating initial evaluation findings

We convened a workshop of independent experts with in-depth experience living and working in the Lower Mekong region to obtain independent feedback on our preliminary evaluation results. The experts provided peer-review review of our findings and helped to assess the theory of change, question relevant assumptions, evaluate conservation prospects, and understand prospects for sustaining conservation outcomes. See Appendix H.

Improving future evaluation ability

We reviewed the NatureServe Dashboard system and its strategy (including data sources) for post-baseline analysis of four core indicators, development of supplementary indicators, and analysis of conservation impact. We reviewed UNEP-WCMC's analysis of current and future trends in major commodities to understand where conservation will become extremely difficult owing to major land use change, understand if significant threats to biodiversity are emerging in MacArthur's priority areas, and identify opportunities for future investments (e.g. interventions in specific commodities).

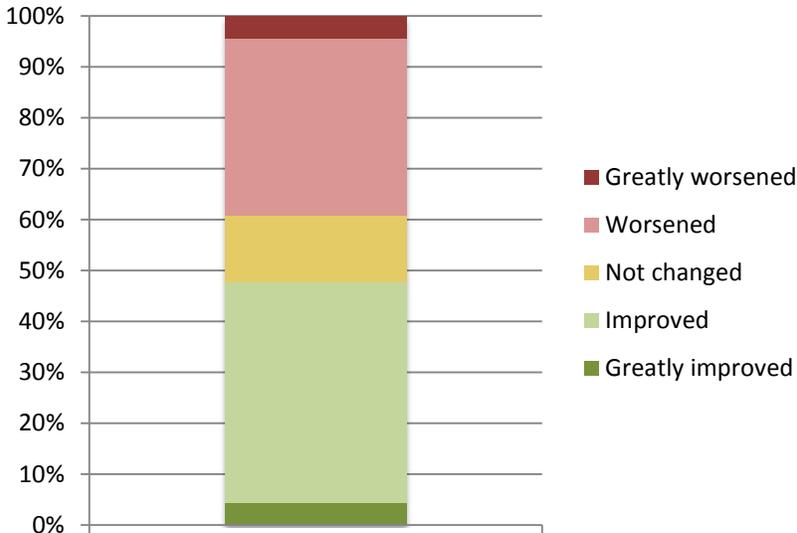
The four core Dashboard indicators will be updated every three years, and there is a need for additional indicators that change more frequently and track region-specific pressures, biodiversity trends, and conservation responses. We compiled a list of potential supplemental indicators that could be developed for the Lower Mekong using information from the online survey, interviews and detailed review of grant reports. We annotated this list with information on possible data sources from site- and landscape-scale monitoring projects supported by MacArthur and other donors and highlighted those indicators that we feel offer significant potential for inclusion into the Dashboard. In response, NatureServe is now actively incorporating additional data and indicators.

Presenting evaluation findings

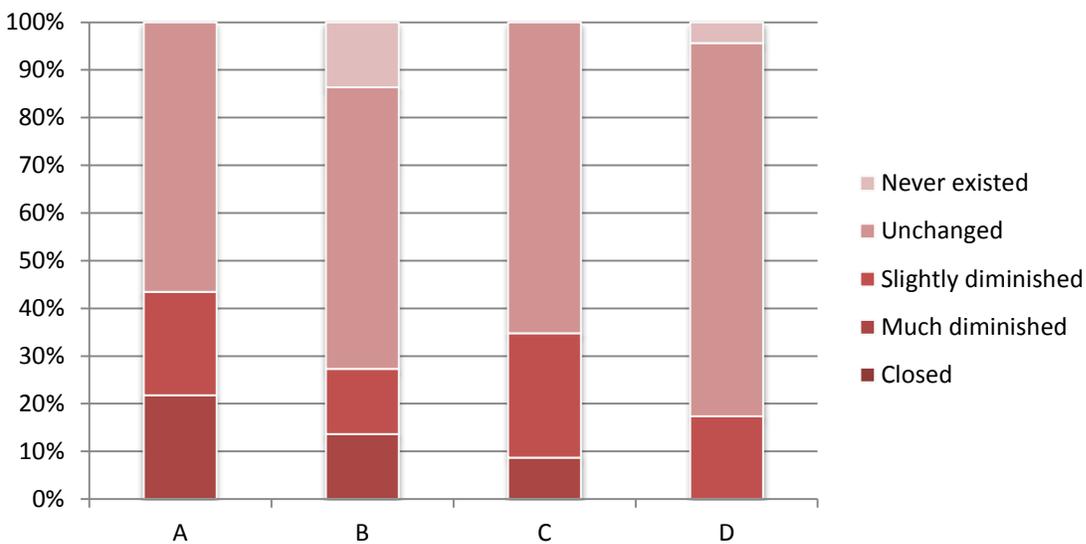
We presented the evaluation report for review and comment by MacArthur grantees in March 2015. We helped to design and facilitate a two-day grantee meeting in Cambodia to coincide with CEPF's mid-term evaluation, during which we presented our findings in detail and sought feedback on conclusions and recommendations. Following feedback from the grantee meeting, we finalized the evaluation report and presented the evaluation results to MacArthur staff in Chicago.

Appendix E. Results of the grantee questionnaire

How have prospects for conservation changed since 2011 (No. respondents=23)?

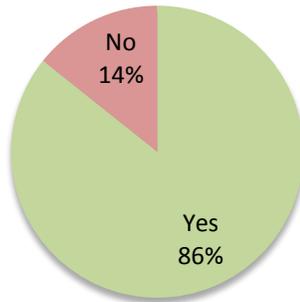


Have the following opportunities that were thought to exist in 2011 diminished or closed (No. respondents=23)?

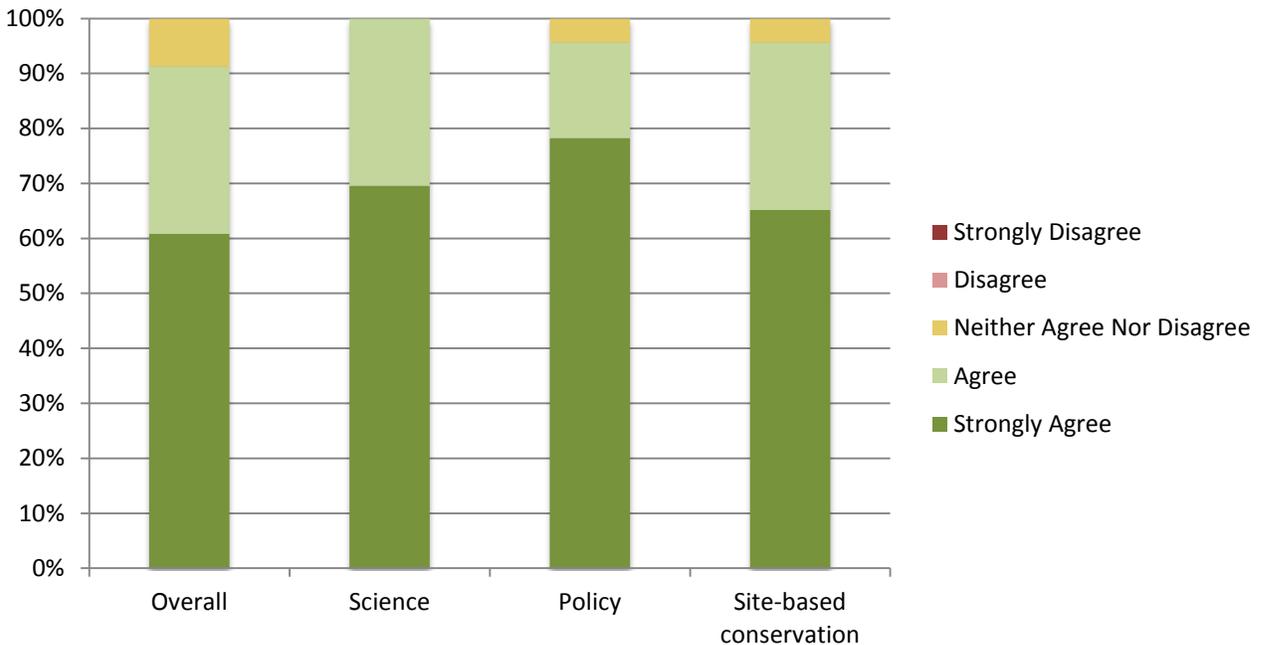


- A. Influencing large-scale developments, including agro-industrial plantations and hydropower dams, through work with local communities, companies and governments
- B. Expanding Payments for Environmental Services approaches, and other economic incentives for conservation
- C. Building local community rights and capacity for natural resource management
- D. Measuring and communicating impacts of conservation investment on biodiversity and human wellbeing

Have new opportunities for conservation emerged since 2011? (No. respondents=21)



Is MacArthur’s focus on making grants in the areas of science, policy and site-based conservation still relevant (No. respondents=23)?

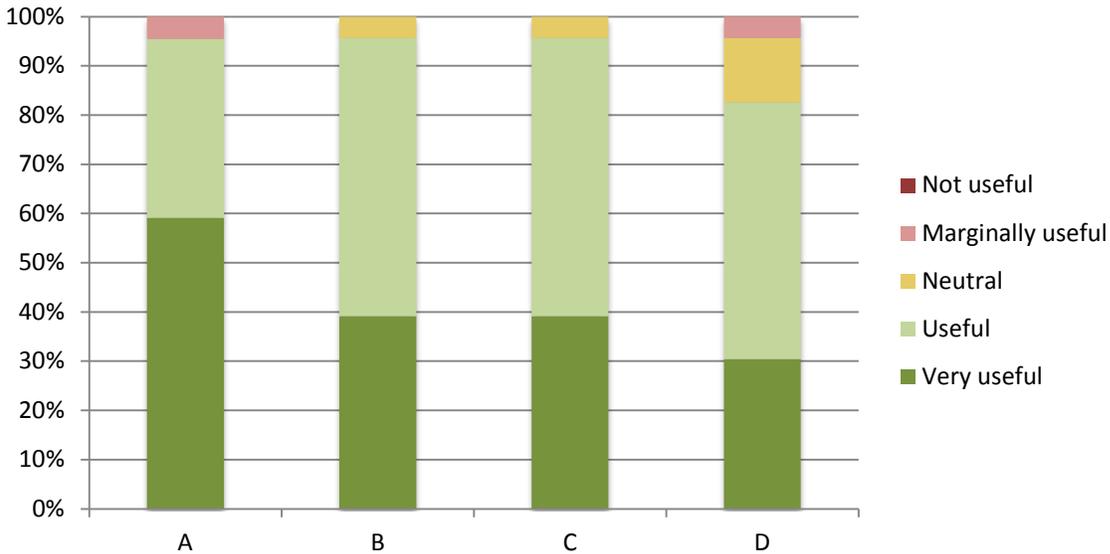


Science -- Better understand the ecology of the aquatic ecosystems of the lower Mekong; quantify the impacts of hydropower, large scale agriculture development, and climate change on the ecosystem

Policy -- Shift the policy and practices driving hydropower development, mining, and large scale agriculture in ways that reduce pressure on natural ecosystems

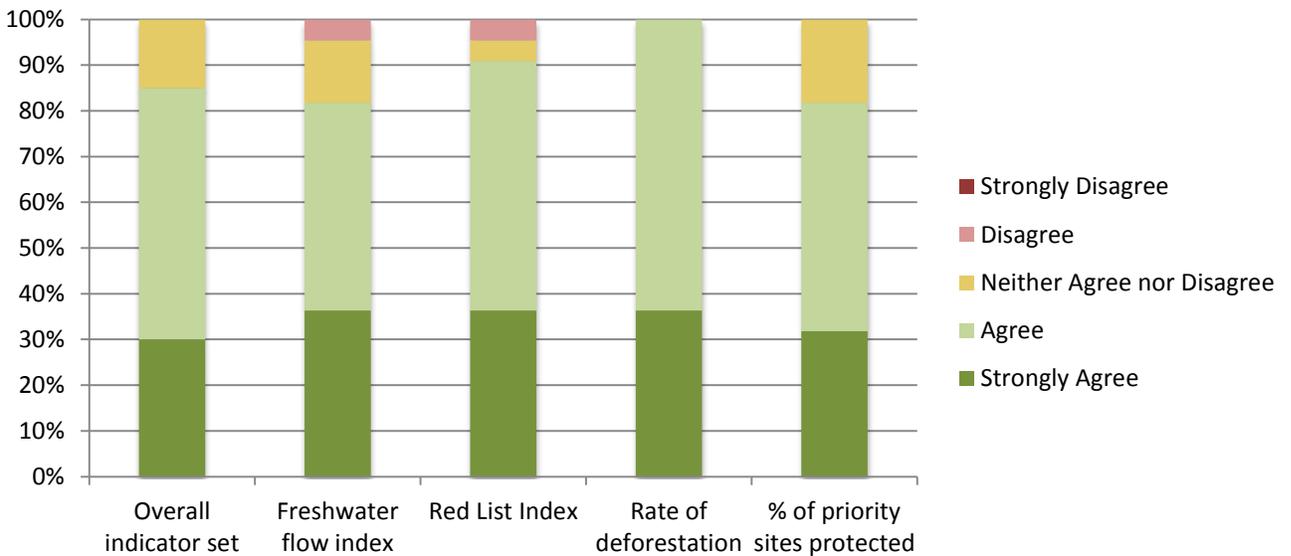
Site-based conservation -- Experiment with approaches to site based conservation that rely upon direct incentives for individuals and communities to act as stewards of priority sites

MacArthur is using the following longer-term targets to track conservation progress in the region. Are these targets useful for tracking progress at a regional scale (No. respondents=23)?

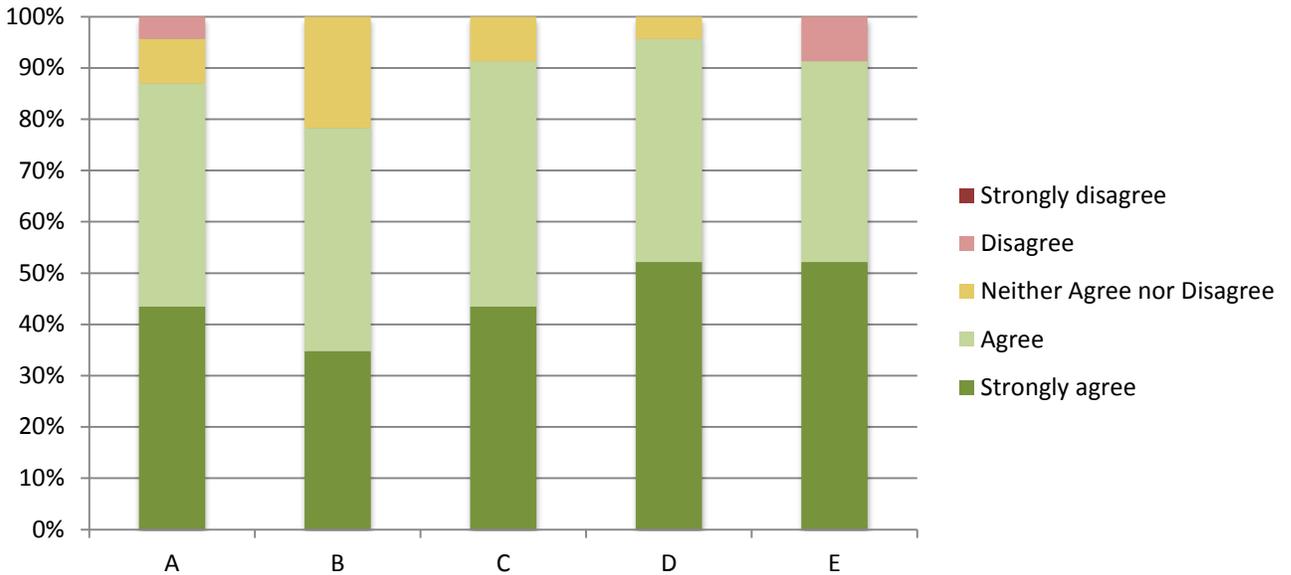


- A. Ecosystem services, particularly services related to water and fisheries, which contribute to health, livelihoods and well-being, are sustained
- B. The extinction of known threatened species is prevented, particularly those most in decline
- C. The rate of loss of natural habitats, including forests, is reduced and where feasible brought close to zero
- D. At least 50 percent of priority sites for biodiversity and ecosystem services are under effective conservation management

MacArthur is using the following Dashboard indicators to measure progress toward achieving these targets. Are these indicators the best ones to enable evaluation of impact (No. respondents=22)?

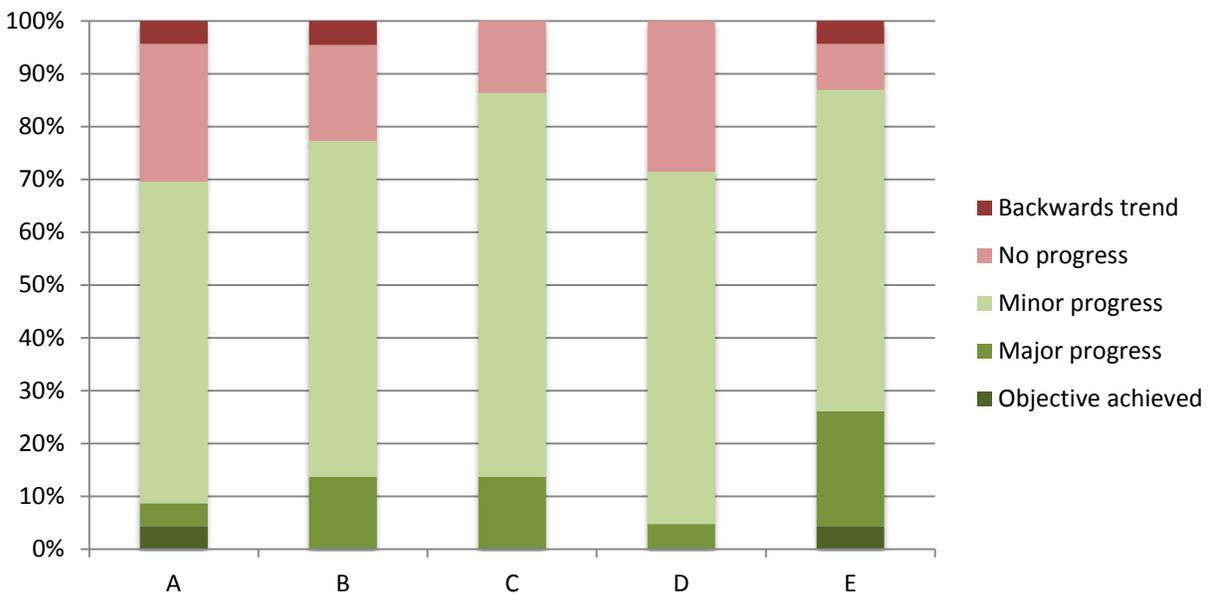


MacArthur is pursuing the following intermediate outcomes in the Lower Mekong. Are these outcomes the most relevant (No. respondents=23)?

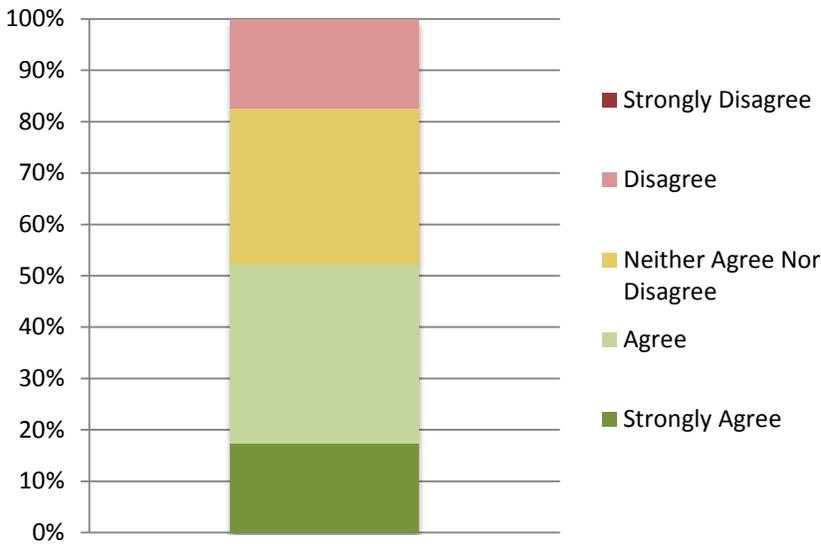


- A. The contribution of high biodiversity ecosystems to economic growth and food/water security is reflected in national development strategies
- B. Policies that support widespread adoption of conservation incentive programs, such as payments for ecosystem services (PES), are developed and implemented in high priority sites and landscapes
- C. Sites of particular importance for biodiversity and ecosystem services are safeguarded more effectively using decentralized and/or traditional resource management
- D. Financing is increased for protected area systems, sustainable forestry programs, fisheries management, and ecosystem-based adaptation to climate change
- E. Understanding is increased of the contribution of conservation action to human well being

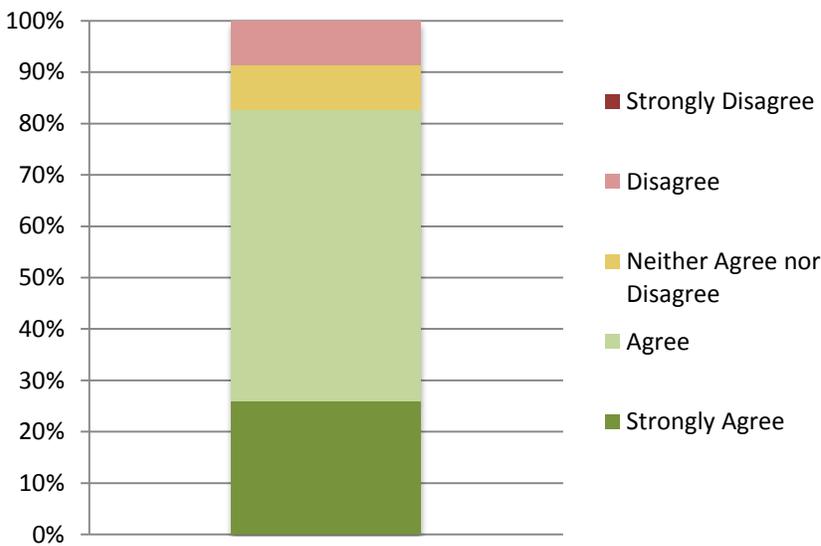
Can you see progress towards these intermediate outcomes (No. respondents=23)?



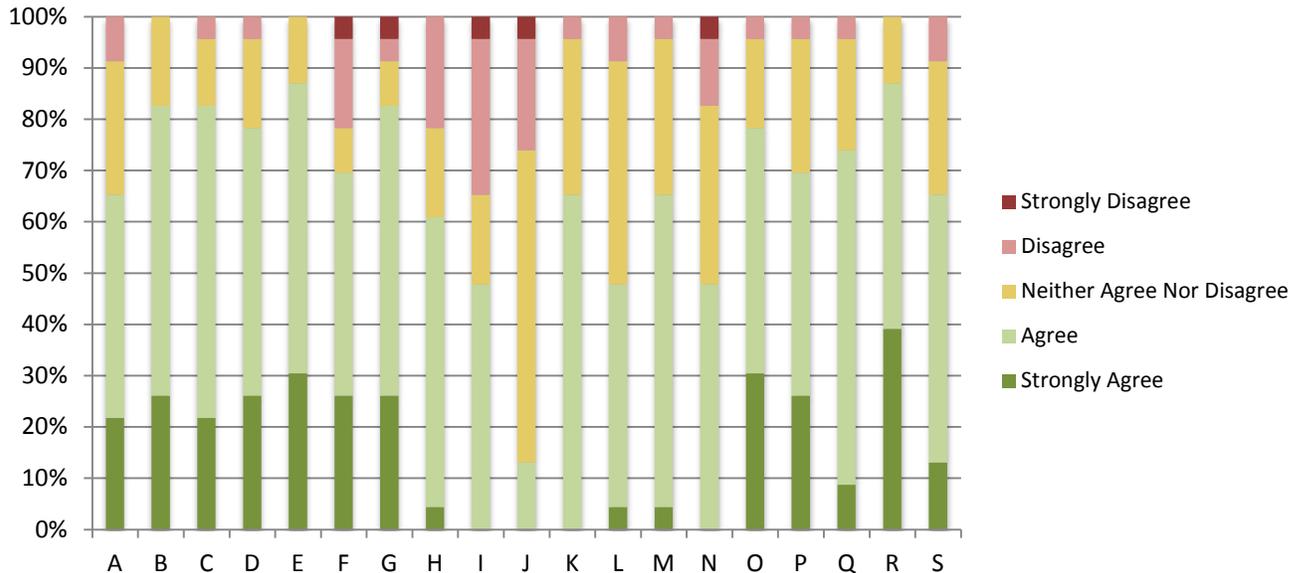
Is community-led conservation in the Lower Mekong poised to achieve meaningful local and/or large-scale ecosystem outcomes (No. respondents=23)?



Do you think MacArthur's Theory of Change is still relevant for the Lower Mekong (No. respondents=23)?



Do you think that the following assumptions underlying MacArthur's grant-making in the Lower Mekong are valid (No. respondents=23)?



- A. Civil society can describe the importance of high biodiversity ecosystems to sustainable economic growth persuasively to key decision makers.
- B. Civil society can illustrate ways to generate positive incentives for environmental stewardship at the highest priority sites and landscapes.
- C. Civil society can strengthen resource use rights of local communities and Indigenous Peoples who manage many of the high biodiversity ecosystems that provide benefits to others in society.
- D. Civil society can contribute to testing and evaluating policies that distribute the costs and benefits of ecosystem management efficiently and more equitably among the users and providers of ecosystem services.
- E. Civil society can monitor the status/trends in the health of ecosystems, pressures on them, and the effectiveness of conservation responses with scientific rigor and share this information with a broad audience.
- F. Ecosystems and the ecological processes that produce benefits for society can be understood sufficiently to value and then manage for them.
- G. Some ecosystem benefits – both economic and non-economic – are sufficiently valuable to be prioritized by society in resource use decisions.
- H. Sufficient capacity exists in potential grantees to conduct rigorous policy analysis and resource valuation studies.
- I. Mekong governments do not completely repress community participation in decisions involving large-scale development and infrastructure projects.
- J. Companies involved in agro-industrial plantation are willing to engage civil society in improving CSR policies and programs.
- K. Mekong governments continue to allow some media coverage of issues related to development, resource degradation, and affected communities.
- L. Sufficient capacity exists in potential grantees to support the design and implementation of PES approaches.
- M. Innovative approaches to site-based conservation will be supported by communities and government.
- N. Mekong governments do not completely suppress ongoing land registration efforts with rural and Indigenous communities.
- O. Existing models for community conserved areas (CCAs), community forestry, and/or community fisheries can be scaled up.
- P. Existing models for co-management mechanisms for formal protected areas can be scaled up.
- Q. A common standard for monitoring the impacts and effectiveness of conservation actions can be agreed by a diverse range of stakeholders.
- R. Existing models for developing future conservation leaders can be scaled up.
- S. Sufficient capacity exists in potential grantees to support the design and implementation of regional monitoring systems.

Appendix F. Highlights of progress towards MacArthur's medium-term objectives and 3-year targets in the Lower Mekong

3-year targets	Achieved to date?	Investments toward 3-year targets	Progress highlights
At least 5 policies and programs promoting hydropower and agro-industrial development in priority landscapes are analyzed and the findings shared publicly	Yes, already: > 5 policies & programs	EarthRights International (ERI), Univ Canterbury, Oxfam, WWF, Stimson Center, WCS, CI, Sustainable Fisheries Partnership (SFP), PanNature, Global Witness, Boston Univ, International Rivers (IR)*	<ul style="list-style-type: none"> Science brief on potential impacts of planned road through Tonle Sap floodplain adopted by Technical Working Group on Fisheries and presented to Asian Development Bank, leading to the Bank's decision to cancel funding for the road (WCS and CI) Lawsuit by 22 Thai communities challenging Xayaburi Power Purchase Agreement accepted by Thai Supreme Court, setting important legal precedent and requiring any PPA signed in Thailand to have a transboundary EIA. Coalition of NGOs in Cambodia, Thailand and Vietnam filed complaint to Malaysian Human Rights Commission against developer of Don Sahong dam (ERI and IR) G8 and FAO principles for responsible agricultural investment influenced to ensure transparency and accountability (Global Witness) Technical input provided to development of the EIA sectoral guidelines on oil, gas and mining in Cambodia (Oxfam) Development scenarios and their impact on water flows in 3S basin modeled in collaboration with MRC and presented in international fora (Univ Canterbury) High level workshop on 'Finding Solutions to Equitable Hydropower Development Planning in the Lower Mekong Basin' convened; Mekong Standard for maximum acceptable transboundary impact from dams promoted (Stimson) Policy analysis on 'Green Growth in the Greater Mekong Subregion' published and disseminated (WWF) '3S Rivers Under Threat' report highlighting ecological impacts of Lower Sesan 2 dam in Cambodia published and widely distributed; alternative Power Development Plan developed for Thailand (IR)
PES policies developed in at least 1 landscape	Limited progress: few proposals	Univ of Canterbury, WWF, WCS	<ul style="list-style-type: none"> Two village-level PES schemes expanded in Cambodia; Lao power company committed to expand PES-like support of PAs in Bolikhamxay landscape (WCS) Report on 'The Economic Value of Ecosystem Services in the Mekong Basin' published (WWF)
Conservation agreements established in at least 3 KBAs	Almost: 2 KBAs	Saola Working Group (SWG), RUPP, BirdLife International*	<ul style="list-style-type: none"> Application for new Protected Forest at Western Siem Pang ratified by Government of Cambodia; Green Sea Industries economic land concession in another part of at Siem Pang officially reduced from 100,852 ha to 9,800 ha, paving the way for establishment of a second Protected Forest (BirdLife International) Lao villagers collecting snares to protect Critically Endangered Saola through incentive agreements (SWG) Nest protection by five communities in Cambodia lead to measurable increases of sandbar nesting birds (RUPP)
Community conserved areas (CCAs), community forestry and/or community fisheries established in at least 3 KBAs	Some progress made: at least 1 KBA	CI	<ul style="list-style-type: none"> In Cambodia, implementation of policy creating Tonle Sap community fisheries supported, regulations to combat illegal fishing enforced, management of two Community Fisheries strengthened, three new Community Fisheries created (CI)
Strengthen resource use rights of local communities and Indigenous Peoples in at least 5 KBAs	Good progress made: at least 3 KBAs	CEPF, NTFP-EP, Oxfam, Living River Siam, CI, PRCF, RUPP	<ul style="list-style-type: none"> Cultural Fish Conservation Zones established and strengthened in the Ing River Basin (Living River Siam) Community fisheries certificates submitted to Cambodian Fisheries Administration (PRCF) Community fisheries co-management introduced at Boeung Prek Lapouv KBA in Cambodia and forest conservation integrated into local land-use plans around Chonbuly KBA in Lao PDR (CEPF) Structure developed for integrating community-based bird conservation into management by provincial authorities in Cambodia (RUPP)
At least 1 private sector partnership is established to strengthen Corporate Social Responsibility (CSR) policies and programs in the agro-industrial	Good progress initiated	BirdLife, WCS	<ul style="list-style-type: none"> Engagement agreed between Vietnamese rubber company HAGL and BirdLife International to implement activities that mitigate the impact of the HAGL economic land concessions in Lomphat Wildlife Sanctuary. This shows some promise to grow into a genuine partnership in the coming years. Multinational company identified that is open to engagement on best practices in Seima, Cambodia (WCS)

sector			
Co-management mechanisms for formal protected areas established or strengthened in at least 1 KBA	Yes: 2 KBAs	PRCF	<ul style="list-style-type: none"> • Zoning of Lomphat Wildlife Sanctuary completed; establishment of Serei Mongkol/Trapaing Chres Community Protected Area underway (PRCF) • Zonation of Kulen Promtep Wildlife Sanctuary drafted with MoE which will yield >100,000 ha for communities and community forestry (WCS)[†]
At least 20 CBOs are actively involved in reviewing and commenting on large scale development processes in priority landscapes	Yes: >20 CBOs	ERI, CEPF, NTFP-EP, Oxfam, Living River Siam, PanNature Global Witness, BirdLife*, IR*	<ul style="list-style-type: none"> • High profile report '<i>Rubber Barons</i>' led to IFC investigation and commitments from Vietnamese rubber companies to review holdings in Cambodia and Lao PDR and bring activities in line with the law (Global Witness) • Policy brief analyzing impact of Lower Sesan 2 dam in Cambodia published and Mekong Legal Network strengthened (ERI) • National and regional river networks supported to hold high-profile public dialogues in Cambodia and Vietnam on hydropower development in the Lower Mekong Basin (Oxfam) • People's Council of Ing River Basin, a network of community-based NGOs, established to evaluate impacts of development in Ing River Basin (CEPF) • Data on Mekong dams, ecosystems and livelihoods shared with Thai National Assembly and Mekong Regional Network on Climate Change Adaptation & Water Resource Management (Living River Siam) • Civil society organizations in Cambodia and Vietnam fed into EIA process for Pak Beng, Pak Lay, Sanakham dams (IR)
At least 20 articles and/or television and radio features highlight the environmental and social impact of public and private sector decisions related to agriculture, hydropower, linear infrastructure, and other sectors driving habitat conversion	Yes: >20 articles	Oxfam, Living River Siam, Stimson, WCS, SFP, PanNature, IR*	<ul style="list-style-type: none"> • Extensive coverage in local, regional and international media of threats posed by hydropower dams in the mainstream Mekong and tributaries (IR) • Article '<i>Hydropower Dams on the Mekong: Old Dreams, New Dangers</i>' published in <i>Asia Policy</i> (Stimson) • Media Bridge Program in Vietnam facilitates publication of more than 25 articles development programs and policies impacting the environment (PanNature) • Ten video clips on the livelihood of Mekong River communities produced (Living River Siam)
A common standard for monitoring the impacts and effectiveness of conservation actions is proposed and debated at regional fora	Progress underway	FFI, NatureServe	<ul style="list-style-type: none"> • Dashboard presented and regional monitoring discussed at joint workshop of MacArthur, CEPF and Margaret A. Cargill grantees in March 2015 • Fifteen Cambodian nationals undertook applied research and monitoring in three regions of Cambodia including monitoring of landscape change and forest mammals
At least 10 peer reviewed journal articles published by graduate students from the region on issues relevant in priority landscapes	Good progress achieved: 4-6 journal articles	FFI, IFReDI, Univ Washington	<ul style="list-style-type: none"> • Five Cambodian research associates conducted research and co-authored peer reviewed articles (FFI) • Study analyzing impacts of hydropower and climate change on the Tonle Sap published in <i>Ecological Modeling</i> with local MRC co-author (Univ Washington, Univ Canterbury)
Baselines for at least 4 supplemental indicators developed	Yes: 4 indicator baselines (at specific sites)	CEPF, IFReDI, Univ Washington, WCS, CI, Boston Univ, BirdLife*	<ul style="list-style-type: none"> • Wildlife populations, livelihoods, forest cover, and threats monitored in two landscapes, Cambodia (WCS) • Data on relative abundance and fish species composition collected at 8 Cambodian sites; Fisheries Administration officers and 32 fishermen trained in data collection (IFReDI) • Baseline data compiled for fish catch, illegal activity, and flooded forest change in several Cambodian sites (CI) • Population surveys of sandbar nesting birds conducted (RUPP)[†] • Monitoring of globally threatened bird species conducted (BirdLife) • Assessment of seasonal fish species diversity in Tonle Sap completed (Univ Washington, Boston Univ)
At least 5 organizations based in the region are actively engaged in developing long-term regional scale monitoring plans	Some progress made: 2 orgs	Univ Canterbury, IFReDI, Univ Washington, CI, Boston Univ	<ul style="list-style-type: none"> • Standard monitoring protocol in Tonle Sap fisheries developed and initiated (IFReDI, Boston Univ) • Community researchers trained and implementing monitoring protocol in 8 sites in Cambodia (CI)

* Targets for these grants were not specified in grant documents and therefore assumed by evaluation team.

Appendix G. Summary of expert workshops, 4-5 January 2015, UK

To obtain independent review of our evaluation results, we convened a small group of independent experts with extensive experience working in the Lower Mekong (Will Duckworth, Edward Pollard, Hugo Rainey and Tony Whitten). Below is a summary of key topics discussed in these meetings.

Changing conservation prospects and progress with enabling conditions

It was noted that national capacity and understanding are increasing significantly, but are still far from what is needed for successful conservation. Disappointment was expressed about progress with long-term funding, and it was noted that Thailand demonstrates that it is possible for countries in the region to dedicate sufficient budget for protected area management.

The growth of cross-border investment was discussed at length, and there was agreement that – though such efforts may often be unsuccessful – it will be important to engage international companies and investors also (e.g. Chinese, Vietnamese). Experience had suggested to the group that most success was likely to be achieved by working with senior people at corporate headquarters, rather than individual local offices. Regarding China, it was noted that there was a need for a separate, specialist approach that included experienced partners.

MacArthur's theory of change and underlying assumptions

Concerns were expressed about the Theory of Change having some logical leaps of faith and being insufficient alone. In particular, it was noted that limited political will is not primarily owing to limited understanding but rather a result of self-interest by powerful people. The group believed that donor investments have significantly raised awareness among Cambodian communities of the negative effects of dams on rural livelihoods, but thought such awareness probably already existed within government. It was noted that civil society awareness has already had great success in some countries (e.g. Thailand) but will not yet have much impact in others (e.g. Lao PDR).

Targets, indicators, and monitoring

This topic generated rich discussion on the entire focus and structure of MacArthur monitoring efforts and formed the basis for Appendix J.

Recommendations

- There is a need for complementary donor strategies that not only tackle big picture issues (e.g. on policy), which will take a long time to reap benefits, but also hold the line on species and sites until progress has been made on big picture issues.
- Methods to tackle wildlife trade are case- or site-specific and so need tailored actions.
- Sustained mentoring of future leaders is key to the success of conservation in the region. This will be hampered by the decreasing number of opportunities for high quality, passionate international people to work in the region.
- Relationships among national governments in the region play an important role in mega-development decisions in the region, and so offer opportunity for leverage.
- To influence infrastructure, it is critical to get in early because there is limited ability to influence design and operation of the most damaging projects.
- There have been prior attempts to tackle the early stage avoidance of development projects (e.g. hydropower SEAs) but little clear learning from them. An assessment of lessons learned would be very useful in guiding future efforts to tackle development planning.
- MacArthur's long-term engagement in the region is vital in the Lower Mekong, as it is the continental region of earth where the most species are facing imminent extinction.

Appendix H. Summary of grantee workshop, 5-6 March 2015, Cambodia

A meeting of MacArthur grantees was held immediately following the CEPF mid-term assessment workshop in Siem Reap, Cambodia (5-6 March 2015) with the following objectives:

- Review what has been learned on key topics during the evaluation and the CEPF workshop;
- Solicit feedback from MacArthur grantees on key issues emerging from the evaluation;
- Discuss in detail two areas of particular importance for the future: (i) Monitoring, objectives and targets, and (ii) Recommendations for future investment.

Representatives from fifteen organizations currently receiving MacArthur support were in attendance, along with a number of observers from the MacArthur Foundation, CEPF, and the Margaret A. Cargill Foundation. This appendix briefly summarizes the results of this workshop. High-level recommendations and clarifications emerging from the discussions have been incorporated into the final version of this report; full discussion notes have been given directly to MacArthur.

H.1 Summary of breakout group discussions on key questions emerging from the evaluation

Following introductory presentations from MacArthur and the evaluation team, participants divided into groups to discuss one of three key questions emerging from the evaluation. The results of these discussions, which were presented and discussed further in plenary, are outlined below in the participants' words.

Group 1: How can international/regional companies and investors best be engaged on large-scale developments?

- Step 1: Need to 'follow the money' (market and investor trail) and then analyze the company involved before strategy can be developed
 - International/regional; State/private; prestige/profit; Consortium
- Step 2: Engagement of regulatory/industry framework
 - Government/industry policy advocacy (need for focus on implementation);
 - Regional/International approach
- Step 3: Business Enterprise strategy
 - "Good/Bad Cop" OR "Inside/Outside" approach
- Step 4: Recommendations for MacArthur
 - Strategy: Continue to support different strategic approaches
 - Information: Help to facilitate information flow amongst grantees in the region and globally:
 - Mapping of corporate and industry engagement across the portfolio and
 - Subscription to financial databases (shared resource)
 - Coordination:
 - Support to identify synergies, e.g. bring good cop and bad cop together
 - Support to identify how science can be better used by partners to influence corporate practices
 - Support to build capacity to identify opportunities and capacity to engage at regional level

Group 2: How can political support for conservation best be increased?

- Identify and support champions in the Government and CSOs

- Engage with the right-based and development NGOs to integrate the element of conservation to the work on good governance
- Engagement with private sector especially with the international companies and the full-impacts investments for leverage
- Build synergy with the governments anti-corruption campaign
- Use the Green Economy approach which is supportive of biodiversity to influence key decision making, to ensure the natural capital restoration
- Building Institutional relationship with the government agencies and informal personal relation with champions/key influencers
- Increase use of media including the social media
- Take more risks, move beyond comfort zones, engage with influential businesses to influence changes
- The power in the 3 countries is concentrated centrally by a few people, an opportunity to influence without reaching out to wider group of actors
- Use the leverage of international conventions that the Government signed up or encourage the Government to sign on to those convention especially the Convention on Biological Diversity
- Make connection between conservation and poverty alleviation



Group 3: How can science be better designed and targeted to influence decision-makers?

- Establish vehicles for science delivery as part of the science process at the outset when creating the research questions
- Identify your “client” and understand what decisions you’re trying to influence
- Create a public demand for evidence- based policy using sound science and identify who the champions are – e.g. TWGs,
- Identifying existing mechanisms for delivery and information sharing e.g. institutions, agencies TWGs
- Package science in ways that are accessible and appropriate for the audience
- Build ALL stakeholder capacity for involvement at the development of the questions and for decision makers to understand and use the science.
- Recognize science is not in a vacuum and needs to be integrated with other efforts and help respond to e.g. pressures such as - advocacy, media

- Recognizing that it is essential to feed the result through an integrated process involving pressure, demands, engagement etc.
- Donors should ask of proposals:
 - What is the decision that is to be influenced
 - Who is the “client”
 - What is the capacity of the client?
 - What is the mechanism for the sharing of the science to influence the decision?
 - What is the conservation output/goal?
 - What are the tools for evaluation of the project?

H.2 Summary of breakout group discussions on monitoring, objectives and targets

Day 2 of the workshop began with a framing presentation from the evaluation team on monitoring, with a focus on the outcomes, measures and indicators in the evaluation framework that MacArthur developed after the Lower Mekong portfolio evaluation began. This was followed by a presentation from Healy Hamilton on NatureServe’s counterfactual analysis for Cambodia.

Participants then divided into breakout groups to address two sets of questions:

- Are the new proposed short-term and intermediate measures and indicators appropriate and useful, or how could they usefully be changed? Are any key measures/indicators missing? Are short-, medium- and long-term indicators sufficiently well linked?
- How else can the Dashboard/counterfactual analysis be used to measure impact of donor investment? Are there thus other priority data, measures and indicators that should be collected/incorporated?

Each of the three breakout groups approached their task differently, with two groups tackling the first set of questions and one group tackling the second. Below are key results of their discussions.

Group 1: Are the new proposed indicators appropriate or useful?

- Missing outcomes and indicators
 - Human well being/alternative livelihoods
 - Integration of targeted science indicators needs to be improved
 - Mitigation measures
 - Number of champions increases
 - Better coordination
 - Addressing issues of climate change, especially adaptation
- Improving integration across short, intermediate and long term outcomes and indicators
 - Community/civil society participation is integrated into decision making
 - Protection is integrated into development plans

Group 2: Feedback on intermediate outcomes and indicators

- Human well-being measures should be defined by communities themselves
- Policy frameworks are not a sufficient indicators, must incorporate implementation of that policy
- Importance to include measures on natural capital assessment and accounting – e.g. valuation mainstreaming
- For community based models, exercise of rights is more important than “paper” acknowledgement of rights

- Coordination and leveraging of conservation funding is as important as amount of overall funding
- MacArthur and CEPF should look for synergies among these outcomes, measures, and indicators and CEPF Long Term Vision exercise

Group 3: How else can the Dashboard/counterfactual analysis be used to measure the impact of donor investment across the Mekong basin?

- Measurement of intermediate term outcomes
 - Facilitate capturing ecosystem valuation data when available
 - Critically Endangered bird census data
 - Camera trapping
 - Fish biomass/unit fishing effort/water volume
 - Tourism visits to protected areas
 - Use of existing national reporting data e.g. CBD
- Recommendations
 - Donor requirement that data is shared with databases ebird, wildlife photography index
 - Standard survey methodologies across the landscape
- Measurement of short term outcomes
 - Policies supporting biodiversity – subjective and are difficult to measure
 - Wildlife trade data
 - Frequency and intensity of fires across the landscape
 - (Indicates presence of people in the landscape)
 - Human population density – how to measure it, much rural to rural migration in Cambodia
 - Changes in forest structure over time – particular issues with DDF
 - Road networks densities
- Recommendation
 - Promote standard survey methodologies across the landscape
 - What other information is easily available?
- Counterfactual impact and analysis
 - Link to EU support to Cambodia TWGs developing baselines on forestry, fisheries and agriculture
 - Work with civil society working in KBAs to agree common data capture (bottom-up data generation)
 - Undertake spatial study of CEPF investments

H.3 Grantee feedback on recommendations for future investment

In the final section of the workshop, the evaluation team presented the recommendations for future investment from the evaluation report. Participants were asked to vote for what they considered to be the three most important recommendations. They were then asked to write specific, concrete suggestions for initiatives that MacArthur could support to make significant advances towards those recommendations. All of the suggestions provided by grantees for each recommendation are presented below, in their own words. The wording of some of the recommendations in the main body of the report has been altered following discussion at this workshop.

Continued emphasis (promising work to be continued):

1. Build on existing galvanization of civil society by (i) building better links among grantees and portfolios, and (ii) increasing donor linkages to bring more social- and development-focused actors into an alliance against irresponsible development. **(6 votes)**
 - a. Within this, it is important to identify and support convening actors, platforms and processes to make the links between the technical expert organizations and rights-based/developmental actors; these processes need to be sufficiently resources. Some analytical work, some dialogues/forum; synthesizing of results of pilots and facilitating the transformation of learning into recommendations that can work their way through to decision-making bodies
 - b. Develop a mechanism to allow for rapid response amongst grantees for advocacy agendas (a quick way to ensure coordination amongst groups for common goals); develop a safe document depository (like Wikileaks) to allow for greater transparency of projects like dams, ELCs, etc. to improve access to project designs, EIAs, agreements
 - c. Galvanizing and supporting civil society
 - d. Civil society should be more specific and invest on indigenous people
 - e. National/regional level: funds to convene NGOs specifically working on similar scopes of work to facilitate (i) sharing of challenges and best practices, particularly around community-based approaches and models for financial sustainability; (ii) arenas for collaboration among NGO community, opportunity for collaborative project to donors (CEPF, MacArthur); (iii) opportunities for piloting innovative technologies and approaches; (iv) data sharing, etc.
 - f. Coordination of projects across sectors by encouraging partnerships and taking on compatible roles e.g. Good cop, bad cop, facilitators, technical support, advocacy, community engagement – working towards a ‘whole systems’ approach to project development - > Encourage suites whilst being mindful of the independence of the various projects.
 - g. Support the development of ‘toolboxes’ containing protocols, methods, lessons learned, best-practice examples, etc. for STANDARDIZATION and COORDINATION of actions and approach
 - h. Ensure when evaluating them, that proposals recognize the need for a multi-faceted approach and address it through coordination, awareness and partnerships – drawing on their own expertise but also recognizing the value of involving others in the wider community who have other skill sets that are valuable to addressing the problem statement proposed
 - i. Connecting grantees working on similar problems/similar interests. from the same or different directions – e.g. from a human welfare, from a conservation perspective, from a food security angle – but all looking at impacts on fisheries or all looking at impacts of dams, etc.
 - j. Connect to a wider funding portfolio of donors e.g. the science foundations, social-science grant-making organizations, welfare donors, etc.- USAID, EU partners? Explore possibilities.
 - k. Help create opportunities for sharing lessons-learned and galvanization of outputs and collaboration efforts through direct support to network development projects, specific funds for meeting/workshops for grantees- to be organized by grantees as well as potentially stipulating as a requirement. And facilitating sharing through meetings arranged by donor group (such as Siem Reap 2015).

- l. Facilitate information exchange by requesting 2-3 page (long) executive summary of the project ONE at the outset and ONE at completion to be shared with the grantee community.
 - m. Request to maintain the focus on Biodiversity conservation and links to community as well as inclusion of science as a driver for knowledge and understanding for development of management and mitigation measures – One of the few donors supporting this important work – please don't change!
 - n. Foster/Encourage/Mediate cross-sector collaborations by informing grantees of each others' work.
2. Maintain a two-pronged approach to improving corporate best practice: continue support to campaigns critiquing companies and their financiers, but also increase support to engagement of companies under pressure to help them improve their mitigation. **(6 votes)**
- a. Impose EIA and safeguard standard to bank/financial institutions that finance development projects like hydropower dams, land concessions, mining, etc.
 - b. Provide indisputable best practice to private sector developers using: comparative sector analysis, financing standards, risk/opportunity analysis (business case), human rights framing, complementary environmental/social (no trade offs), cumulative impact assessment, safeguards.
 - c. Strengthen efforts for companies that make it easy for companies to “do the right thing”, not by lowering the bar but by carrot and stick for environmental/biodiversity outcomes which support community rights and livelihoods
 - d. Support initiatives to explore engagement with private sector in improve/promote best practices, at the same time strengthen capacity of local communities to make informed decision
 - e. International, US and European companies often have CSR policies already institutionalized in their companies whereas Vietnamese, Khmer, Chinese etc. do not, and these are the companies in the region doing the harm. These companies do not know and are suspicious of NGO motives. So NGOs need to adapt their approaches to these companies to take the above into account.
 - f. In a name and shame approach both environmental and community voice components are important. Often this will provide the leverage for engagement of companies. More mapping of corporate engagement across the portfolio would help identify opportunities to share info and collaborate
 - g. Organize a subscription to a financial flows database for grantees
 - h. Coordination of projects across sectors by encouraging partnerships and taking on roles (e.g. good cop-bad cop), facilitators, technical support, advocacy
 - i. Support capacity building efforts that use technical skills/ knowledge etc. to improve rights-based approaches and community empowerment rather than supporting direct advocacy efforts. I.e., subscribing to a ‘knowledge is power’ approach and the ‘clever’ or good use of knowledge in the right ways is often more effective in persuading governments – particularly in the Asian cultural context where direct advocacy efforts based on naming and shaming or the blame approach meet with a defensive response from government and often does not achieve progress.
 - j. Emphasis on Nature and Sustainable use as a POSITIVE strategy and not always something that requires mitigation such as. Finding ways to improve natural capital of natural resources without increasing the harvest rates – e.g. improving industrialization of the outputs and NOT the harvest methods for fish packaging will increase the international market value of the same product thus increasing the economic return on

the same natural product without increasing the pressure on the natural system. Equally applicable to trees and wood products.

3. Tackle vested interests head-on through name-and-shame media campaigns and building alliances with the more ethically-minded decision-makers. **(2 votes)**
 - a. Simple name and shame tactics without a broader analysis of the critical pathways needed for change can be counter-productive. Conversely, building alliances with companies without a principled approach can allow “green washing”
 - b. The reason “tackle vested interests,” “tackle decisions on mega-development” and “shift focus on mega-development” received so few votes was a recognition by the constituency present that these are important issues but these issues are addressed by other donors. MacArthur’ must maintain its focus on biodiversity and KBA conservation. Also the conservation community is not equipped or skilled to address these aforementioned issues.
 - c. Recognizing the possible limitations and that it could compromise efforts – to make effective use of the media to share results -> facilitated through donor community.
4. Directly safeguard priority key biodiversity areas and threatened species, which may not otherwise survive to see the longer-term benefits of policy work. **(12 votes)**
 - a. In recognition that not all species or all KBAs can be effectively conserved given forces of politics and global change, MacArthur should support integrative prioritization analyses that incorporates current status and trends, future projections, and other relevant factors to establish the very highest priority and highest probability of successful outcomes for biodiversity conservation in its areas of portfolio focus
 - b. Support projects that use comprehensive ecosystem conservation approach rather than narrow species-focused conservation; continue to support the development of CCAs and community fisheries
 - c. A rigorous climate-smart prioritization process (using e.g. FOOTPRINT-like approach) is needed to rationalize the PA network. This must be part of government planning processes, but also have participation from multiple stakeholders. The EIA draft law formulation process forms an excellent working example
 - d. Continue to co-fund with other donors to bring about changes at different levels which contribute to positive changes to biodiversity and people
 - e. Safeguarding species, sites and corridors must remain a high priority, including sites with high threat as well as high potential success for protection
 - f. Pilot innovative scalable “results-based” PES models that bring private sector, government and community together delivering reduced business risk and improved community-led resource use
 - g. Collaboration between donors to set up an endowment fund that would enable long-term site support and lasting impact at priority site(s)
 - h. Pilot innovative financing schemes (PES, eco-labeling, green taxes, green subsidies, protected area financing), replicate and roll out
 - i. Create ‘strongholds’ in the RIGHT target areas through a rigorous evaluation process – involving the value of the land, the threats and the likelihood of successful mitigation methods.
 - j. Shift focus towards inclusion of data deficient species and geographies as well as species lower down the IUCN ‘critical list’ – i.e. NOT prioritizing the ones that are Critically endangered where chances of success are limited. Not to exclude these CR species – just to shift focus to more achievable targets.

5. Capitalize on national security concerns and power relationships among countries to tackle decisions on mega-development at an appropriately high level. **(3 votes)**
 - a. In Lower Mekong countries, important decisions are made by 1 or 2 people. The thing we need to do is just tackle that person(s) to make a right decision
 - b. Foster complementary strategies that continue to push for cancellation of irresponsible/unsustainable projects (avoiding negative impacts) while also (i) influencing the siting, design, project development and (ii) promoting projects that do proceed respect FPIC, sharing of benefits and are comprehensive (best practice) in their environmental and social management plans
 - c. Empower/strengthen IP's voice (collective) on this decision making; bring the real representation of Indigenous People
 - d. Help create opportunities for sharing of lessons learned and galvanization of collaborative efforts
 - e. National security is important but need to be careful this message is not easily turned into nationalist sentiment.
6. Commit to long-term engagement in the region and in grantees to ensure lasting successes. **(this overarching recommendation was not opened to specific votes)**
 - a. In order to have sustainability, we need the continued funding support from donor as well
 - b. Committing to long term engagement in the region and subsequent long term support to grantees
 - c. Get creative about funding creativity (perfect fit for MacArthur); the search, the creation of out-of-the-box, funky, potentially revolutionary conservation approaches. Not sure how funding the stimulation of this would look, but we could get creative on that too!
 - d. Commitment to long-term engagement. Investments in ongoing projects that have achieved successes in last funding round with targeted focus on (i) building development support to identify and implement sustainable financing models at the community level (e.g. small-scale, trust funds, microfinance/interest schemes to fund CFCs and community-level PA management), (ii) scoping of small-scale private sector arena to explore opportunities for investment/alignment
 - e. Focus on Financial Sustainability – through creative and innovative suggestions -> suggestion to fund 'think tank' meeting/workshops to generate ideas and innovative solutions
 - f. Invite a 'peer-review' process for proposal evaluation which will technical validation and feasibility checks as well as helping to foster information exchange and collaborations
 - g. Recognize that when you are attempting to change attitudes and to develop infrastructure it takes time (soak-time) for the desired outcomes to be achieved.
 - h. Force grantees to substantiate claims of successes and demonstrate plan/ progress towards sustainability of the project – in terms of the project outputs and financial sustainability – where appropriate.

Altered emphasis (adjustments that could be made owing to lessons learned since 2011):

7. Shift focus on mega development away from trying to cancel projects that are too far advanced towards (i) avoiding the worst developments in the first place and (ii) influencing the design and operation of the projects that cannot be avoided. This will require new approaches to engage government planning/industry ministries and other key actors (e.g., Asian Development Bank), and learning lessons from prior efforts such as Strategic Environmental Assessment. **(6 votes)**

- a. Propose other alternative projects which have less negative impacts (e.g. clean energy, ecotourism); put more conservation investment fund; raise more awareness of the local people to stop mega development
 - b. Not either or with existing emphasis, rather call out more strings to the bow. This can mean a greater focus on those who bear greatest imposed risk (environmental and social)
 - c. Apply green economy scenario modeling (business as usual versus green economy approach which reflects natural capital values) to advocate for greener infrastructure, cleaner energy, cleaner production
 - d. The focus to cancel a project is important even after it goes forward because it gives the leverage to improve design and mitigation and pressure for better projects in the future
 - e. Provide grants for groups working on energy planning within the region in terms of improving policies, technology access and studies mapping out energy possibilities
8. Refocus science to help targeted powerful audiences find solutions, rather than simply understand problems. Ensure that science investments are fit for purpose and targeted to the level at which decisions are made. Key improvements would be increased focus on economic implications; accessible, targeted local language summaries for governments, local people and the media; and greater involvement of scientists from the region. **(8 votes)**
- a. Support also a complement of community-based “science” work; build up opportunities and spaces to surface and validate local/traditional ecological knowledge and system as part of a body of evidence showing sustainable management; commission scientists to support local advocacies; have scientists work with the local experts/”barefoot ecologists”
 - b. Applying a problem-based learning approach; consider and take into account the local knowledge system; create effective platform of communicating research findings to right audience
 - c. Undertake comprehensive natural capital assessment across the region (including validation), i.e. primary data collection that can be provided to key decision makers to make more informed decisions around land use
 - d. Research on market drivers, commodity chains, economic integration and impacts on biodiversity and ecosystems; propose policy solutions based on research results for reducing development impacts
 - e. Science does not necessarily need refocusing but needs to be shared more widely, with likely and existing outcomes and outputs shared so that it is clear what the impact is
 - f. Assess where project advocacy can be better linked to existing science and planned future scientific initiatives
 - g. Science-focused projects should be measured against a checklist that includes: (i) what is the decision you are trying to influence (who is your client)? (ii) what mechanism will be used to provide data/recommendations etc. to decision makers (e.g. TWGs) (iii) what is capacity of mechanism to assess evidence and act on it? (iv) what will success look like?
 - h. Low educated people really believe in science
 - i. Re-focus science to ensure that outputs and targets are considered in the project design. Consideration of the needs for ‘ready-to-go’ information for opportunistic delivery to policy makers
9. Strengthen implementation of existing policies, or new policy development where necessary, that would reduce pressure on natural ecosystems and biodiversity. **(7 votes)**

- a. Policy influence requires trusted science and advisors who must be in place and informed by that science to react when opportunities arise
 - b. Strengthening policy implementation has two components: (i) increasing government capacity and (ii) advocacy around specific projects to show when policies and laws are not being implemented on the ground
 - c. There are good policies set up in Cambodia; the issue is really on the implementation
 - d. Mainstream natural capital values into policies, plans and indicators of progress (GDP++) and ensure that these values are reflected in national accounting systems
 - e. Support efforts to monitor policy implementation and development for providing timely inputs to policies
 - f. Best-practice approaches shared across the sector to improve internal policies and protocols and streamline implementation
10. Learn lessons from, and build on, monitoring to date (including the Dashboard). Improve, and capitalize on the value of, the existing logframe for monitoring portfolio progress. **(5 votes)**
- a. Build capacity through support for projects developing tools, protocols, etc.
 - b. MacArthur can lead coordination with its regional donor partners and their high capacity grantees (such as WCS, CI, WWF, BirdLife) to maximize the standardization of biodiversity monitoring protocols, and support the aggregation, visualization and broad communication of the resulting data on biodiversity status and trends
 - c. Improving M&E, learning lessons and communicating such lessons through tools like dashboard, etc.
 - d. Expand NatureServe modeling to encompass bilateral and multilateral investments in both biodiversity and infrastructural development in Cambodia and the region to broaden comprehensive scope of investment and impacts
 - e. Ensuring that project monitoring requirements imposed by donors are cost-effective. The emphasis should remain on causing a positive conservation change on the ground, not on proving that this change has taken place by increasingly expensive methods that reduce the available budget for causing the change
 - f. Request technical summaries from grantees to share across grantees
 - g. Invite a peer-review process with feasibility checks; also a mechanism for fostering relationships
 - h. The desire for indicators and metrics of success is great, but do not forget the power and utility of a solid narrative. Not all results are easy to quantify, nor do they follow linear pathways
 - i. Ensure that rigorous evaluation is an integral part of implementation – bearing in mind that monitoring/evaluation can be costly but is an essential part of evaluating success of conservation actions.-> shared approaches and shared standardized tools can facilitate this process

New emphasis (emerging gaps since 2011):

11. Tackle soaring wildlife trade through support to tailored actions addressing consumer attitudes, reducing ability of middlemen to operate, and changing hunter behaviors. **(4 votes)**
- a. The tailored actions should focus on demand reduction through better policy and implementation esp. in Vietnam and China where top-down decisions do result in change. Conversely, addressing consumer demand through awareness etc. is a crowded

space (i.e. MacArthur \$ won't buy much) and has not resulted in sufficient change to impact trade

- b. Create, implement and promote policies and publicity focused on law enforcement actions: crime prevention approach to complement existing "attitude" and behavior change approaches (focus: China and Vietnam)
12. Support the development of future leaders through training and sustained mentoring to give ethical, motivated young people a lead in obtaining or retaining key natural resource management positions in government and civil society. **(6 votes)**
- a. Produce human resources in the field of natural resource management and conservation by encouraging children of local community to have good education in the field (degree level); establish the platform of linkages between academician and local community for two way flows of information; create and strengthen the culture of working together among academics, government, NGO, local community and private sector in order to address the common and emerging problems
 - b. Develop 'toolboxes' in protocols, methods, lessons, standardization and coordination
 - c. Build capacity through the support of projects that are developing tools, courses, workshops, protocols that can be used for cross-sector evaluation and/or applied as tools for actions – applied and utilized across sectors e.g. Manuals, templates, etc.

Appendix I. Annotated list of potential supplementary indicators for the Lower Mekong

Indicators offering significant potential for inclusion into the Dashboard (no order of priority)

Type	Indicator	Geographic extent	Data availability
Benefits	Catch per unit effort (all species)	sites	IFReDI/CI community monitoring project is establishing baseline for Tonle Sap sites. UW has obtained some catch data from MRC and may have data from the Tonle Sap Dai outlet fisheries.
Benefits	Communal areas registered and in the process of registration	national	NGO Forum may be compiling these data
Pressure	Number/area of economic land concessions (ELCs) which are approved and subsequently implemented	national	Concessions data are being compiled for Cambodia by Open Development Cambodia
Pressure	Forest loss in and near ELCs	national	The Open Development Cambodia dataset on ELCs could be overlaid with forest cover data. Global Witness is mapping forest loss in ELCs in some sites within Cambodia
Pressure	Road density and proximity to protected areas/KBAs	regional	Could be generated through analysis of satellite imagery
Pressure	Change in flow regimes / water levels		4-5 sites are continuously monitored within the 3S basin (gauging stations by Cambodian govt) but there may be more in other basins
Pressure	Rate of forest degradation/fragmentation	regional	Could be generated through analysis of satellite imagery or perhaps something like the WCS human footprint
Pressure	Change in forest cover within protected and non-protected KBAs	regional	Overlay forest cover change maps with KBAs and protected areas
Pressure	Number of hydro dams which are approved and subsequently implemented	regional	Dams data being compiled regionally by Open Development Cambodia
Response	Fiscal allocation by Mekong governments to protected areas ¹³	national	
Response	Capacity and engagement of civil society	national/ regional	Could use CEPF Civil Society Tracking Tool
Response	Protected area management effectiveness		Could use PAME (protected area management effectiveness) tool
Response	Change in number of large-scale development projects that have a mitigation/offset program up front		Possibly data from development banks
Response	Creation/reform/implementation of EIA laws/policies consistent with international best practices	regional	Mekong Legal Network, Stimson Center or CI may be compiling these data
State	Population trends for priority species	sites	WCS, BirdLife, PRCF have long-term monitoring of threatened species populations, particularly CR birds, in several sites/landscapes; Living Planet Index

¹³ Highlighted by the independent expert group as one of the most useful indicators MacArthur could support and publish, since it is difficult for organisations in the region to present such assessment of government spending.

Additional indicators suggested in survey responses and interviews (no order of priority)

Type	Indicator	Geographic extent	Data availability
Benefits	Fisheries volume annually	national/regional	Data may be available from Fisheries ministries.
Benefits	Access to markets for NTFPs		
Benefits	Resin production		
Benefits	Livelihoods of local communities residing inside and around conservation areas		
Benefits	Healthy rivers that sustain natural ecosystems		
Benefits	Changes from unsustainable shifting agriculture to more sustainable intensive agriculture		
Pressure	Number of chainsaws confiscated and logging trucks coming out of the forest	sites	Possibly being compiled for specific sites by BirdLife, CI, WCS, PRCF
Pressure	Amount of illegal fishing gear seized	sites	Being compiled for a few sites by CI
Pressure	Export figures from Cambodia (e.g. to Thailand)		
Pressure	Rate of community displacement (esp. indigenous groups and ethnic minorities)		
Pressure	Change in sediments (kg/liter) and types of sediments		
Pressure	Change in tenure from protected area to ELCs	national	Open Development may be compiling these data
Pressure	Threat to Mekong Delta from sediment trapping by upstream dams and depleted water tables		
Pressure	Change in flood cycle over time		
Pressure	Extraction of wildlife from key sites		
Response	New conservation or protected areas created		
Response	Protected areas with a person motivated to conserve it		
Response	Number of people in community fisheries dedicated to monitoring		
Response	Increase in community rights (e.g. in dealing with poachers)		
Response	Funding invested annually in the region		
Response	Area of ELCs taken back from concessionaires	national	Open Development may be compiling these data
Response	Countries signing on to regional policy frameworks		
Response	Presence/application of transboundary laws/guidelines including hard and soft law	regional	Mekong Legal Network, Stimson Center or CI may be compiling these data

Response	Improved implementation of EIA laws in key national projects of biodiversity significance		
Response	Constituent communities pushing for environmental protection		
Response	Communities using EIA and PA law to force better outcomes		
Response	Policy, law and regulation and institutional development of Mekong countries responsible for conservation and natural resources management are being enacted and established		
Response	Functionality and not of the MRC and its formal procedures		
Response	National policies consider sustained ecosystem services		
Response	ASEAN takes Mekong issue as a main agenda item		
Response	Natural capital mentioned in key documents		
Response	Villagers become more effective in influencing government		
Response	Consistency of management of legal requirements		
Response	Institutions with capacity/resources to implement policies		
Response	Effectiveness of advocacy strategies both inside and outside the government		
Response	Policy changes related to management that are consistent with the science		
Response	Political/social landscape and changes in civil society		
Response	Increased community awareness and participation		
Response	Communities more active in conservation, especially youth and women		
State	Amount of fish habitat	Regional	Could be generated through analysis of satellite imagery
State	Number of core populations of priority species secured	national/regional	CEPF is generating data for this indicator from its own projects

Appendix J. Perspectives on monitoring, targets, and objectives

J.1 Overall monitoring aims and structure

Monitoring and evaluation is one of the most challenging areas of biodiversity conservation grant-making. Our previous experience, and discussion with MacArthur and other experts during this review (particularly the independent expert group), suggests to us that there are three main levels at which MacArthur is likely to want to monitor change. We feel that MacArthur is on track to put in place such a system, but has not yet clearly outlined its aims for monitoring and plans for achieving those aims. As such, methods and approaches are not yet closely matched to needs. Although there was not time for in-depth assessment of this topic with respondents during this evaluation, we outline these three main levels of monitoring from our own perspective so that MacArthur can step back and further assess needs from first principles during the imminent full CSD evaluation:

(i) ‘Detailed impact monitoring’: to influence management/investment decisions

As noted by a previous CSD-wide evaluation, it will often be expensive and challenging to monitor in a way that is sensitive enough to detect statistically-significant change at the temporal and geographic scales relevant to most donor investments, i.e. to ‘prove’ or quantify the impact of donor investments. We thus recommend such monitoring is generally reserved for a very few individual projects with experimental approaches to conservation, in order to evaluate whether to continue such approaches. The ‘gold standard’ would be ‘Before After Control Intervention’ style monitoring. Such approaches are already being undertaken by some MacArthur grantees, such as BirdLife, RUPP and WCS. Careful consideration might usefully be given to which projects could usefully benefit from such intensive monitoring, and for which projects it may now be an unnecessary luxury.

(ii) ‘Broad understanding of progress’: to demonstrate value of investments

For most (though not all) donor investments, the cost and complexity of genuinely quantifying and attributing conservation impact to investments will be prohibitive. There will remain, however, a need to have a broad understanding of the conservation progress that has been made with donor investments, for example to communicate to internal stakeholders and external partners the value of a grant-making program. Conservation progress is more likely to be evident at the site scale, where cumulative donor investments in individual sites may eventually outweigh ‘background’ rates of biodiversity loss.

MacArthur’s core approach to understanding progress is through expert evaluations such as the current one, based on grantee and other expert feedback. While valuable, such evaluations are inherently subjective and are best supported by more objective data collection and analysis. Recent efforts to expand the NatureServe Dashboard with counterfactual analyses have demonstrated promise in gaining such an understanding. We – and the independent expert group – suspect, however, that such an approach may not be the most cost-effective, or even the most effective. Identification of paired counterfactual sites is fraught with problems, and the likelihood of obtaining statistically-significant results may often be unlikely given small sample sizes of sites in the Lower Mekong. Conversely, using very fine-scale units of analysis (e.g. watersheds within KBAs) may lead to inflation of statistical significance. Evaluation across suites of monitored sites (e.g. comparing invested vs. non-invested sites, or use of multi-variate analysis) offer a greater chance of statistically significant results – and more so, if more sites are monitored.

A simpler, cheaper, yet flexible, system may, however, be preferable to expanding the Dashboard. The BirdLife IBA monitoring framework offers an example of such a system, into which diverse pressure, state and response monitoring data can be collated and compared, whether they be detailed and scientific or simple and expert opinion-based. Such data may be obtained at the site scale, or drawn from global datasets (e.g. on deforestation). Response data could be usefully drawn from an enhanced approach to grantee progress reporting against targets/objectives/outcomes (section J.3) – such a recommendation was also made by a previous CSD-wide evaluation. ADB briefly funded BirdLife to conduct such monitoring across the Lower Mekong, before funding was withdrawn. During this evaluation, ADB expressed interest in reviving a similar approach in future.

(iii) 'Big picture context': to help put grant-making progress (or apparent lack of) in perspective

Conservation operates against a widespread context of decline in biodiversity. It is important to understand this context, to clarify the relative gains (or, more often, reductions in losses) that grant-making has achieved.

The NatureServe Dashboard indicators are at an appropriate level of resolution (national- or regional-level) to understand this context, and how it is changing over time. In the longer term, it is possible that cumulative donor investments – particularly in broader actions such as policy change – may influence such indicators. Any changes are, however, unlikely to be clearly identifiable or attributable to donor investments given the scale of biodiversity decline.

J.2 Initial recommendations for the Dashboard

We think that it will be essential for the Dashboard to provide contextual data showing how these trends compare to the past, to other regions and – most importantly – to what would have happened in the absence of conservation. A landmark study showed that although the Red List Index continues to decline globally, it would have declined a further 18% for birds and mammals in the absence of conservation¹⁴. Remarkable conservation success stories like this would be hidden with blunt application of the Dashboard – we thus strongly recommend a comparative, rather than absolute, approach to presenting indicators.

Even with contextual information, supplementary indicators will help to provide a more complete picture to the core indicators (Appendix I). For example, the core indicator on legal protection of key biodiversity areas does not evaluate management effectiveness; thus, an indicator that shows change in natural habitat within protected and non-protected key biodiversity areas is critical given that protected areas are often targeted for granting of economic land concessions. Indicators with a finer spatial and temporal scale will also be necessary to evaluate progress towards the medium-term objectives.

More broadly than these technical issues, we feel that MacArthur needs to carefully consider what it wishes to achieve with the Dashboard, and thus the process underpinning it. If it is to be sustainable and have value beyond an internal evaluation mechanism, greater consideration will need to be given to who is going to contribute data, how they will be motivated to do so, which key audiences are being targeted, and what behavior change is being promoted within these audiences. The

¹⁴ Fig. 3 in Hoffmann *et al.* (2010) The impact of conservation on the status of the world's vertebrates. *Science* 330.

suitability of the Dashboard for monitoring changes in big picture context (level iii) should be investigated during the full CSD evaluation.

J.3 MacArthur Work Plan targets/objectives/outcomes

The Work Plan makes a good start on developing a logical framework that outlines how projects within the portfolio are intended to contribute to MacArthur goals, supported by MacArthur's Theory of Change. We feel that such an approach is critical to ensuring that individual projects can be chosen on the basis of their contribution to goals, and that project outputs logically lead to desired outcomes in both the short- and long-term. We do feel, however, that the logframe could be much improved by greater attention to several areas:

(i) Language

Language used in the logframe is sometimes confusing:

'Objective' and 'outcome', and 'intermediate' and '3-year', seem to be used as synonyms; we recommend use of just one term in each case.

The distinction between 'objectives'/'outcomes' and 'targets' is unclear, as both appear to be outcome-focused; it may be more useful to refer to 'targets' as 'indicators' or 'indicator targets' since they appear to be indicators of whether 'objectives'/'outcomes' have been achieved.

(ii) Linkage between 3-year and 10-year targets

At present, 3-year targets may often be too easily achieved – either because they are too open to interpretation (e.g. *'At least 5 policies and programs promoting hydropower and agro-industrial development in priority landscapes are analyzed and the findings shared publicly'*) or insufficiently ambitious (e.g., *'At least 20 articles and/or television and radio features highlight the environmental and social impact of public and private sector decisions...'*). More ambitious 3-year targets are not only possible, but could also help the MacArthur portfolio to better contribute to Aichi-based 10-year targets. MacArthur has already started to address this point in its revised evaluation framework.

(iii) Linkage between targets and objectives/outcomes

Some objectives/outcomes do not appear to have any related targets (e.g. *'Financing is increased...'*). In other cases, related targets appear insufficient to indicate success with objectives/outcomes – for example, meeting the target *'PES policies developed in at least 1 landscape'* would fall far short of achieving the related objective/outcome of *'Policies that support widespread adoption of conservation incentive programs, such as payments for ecosystem services (PES), are developed and implemented in high priority sites and landscapes'*.

These issues are briefly noted in the following table. Alignment of targets against objectives was made by the evaluation team, because the Lower Mekong Work Plan did not assign targets to particular objectives. MacArthur's recently revised evaluation framework is starting to address these issues.

Long-term outcome / objective	10-year targets	Notes
Current rates of biodiversity and natural habitat loss are reduced and ecosystem benefits are sustained by conserving priority sites and implementing appropriate policies in high biodiversity landscapes.	<ul style="list-style-type: none"> Ecosystems services, particularly services related to water and fisheries, which contribute to health, livelihoods and well-being, are sustained The extinction of known threatened species is prevented, particularly those most in decline The rate of loss of natural habitats, including forests, is reduced and where feasible brought close to zero At least 50 percent of priority sites for biodiversity and ecosystem services are under effective conservation management 	MacArthur-specific long-term outcomes/targets may yield greater logical linkage to medium-term outcomes

Intermediate outcomes / Medium-term objectives	3-year targets	
The contribution of high biodiversity ecosystems to economic growth and food/water security is reflected in national development strategies, particularly investment in agriculture and infrastructure, and national accounting systems	<ul style="list-style-type: none"> At least 5 policies and programs promoting hydropower and agro-industrial development in priority landscapes are analyzed and the findings shared publicly At least 20 CBOs are actively involved in reviewing and commenting on large scale development processes in priority landscapes At least 20 articles and/or television and radio features highlight the environmental and social impact of public and private sector decisions related to agriculture, hydropower, linear infrastructure, and other sectors driving habitat conversion At least 1 private sector partnership is established to strengthen Corporate Social Responsibility (CSR) policies and programs in the agro-industrial sector 	Outcome likely unrealistic in timeframe, but targets insufficiently ambitious for timeframe
Policies that support widespread adoption of conservation incentive programs, such as payments for ecosystem services (PES), are developed and implemented in high priority sites and landscapes	<ul style="list-style-type: none"> PES policies developed in at least 1 landscape 	Outcome likely unrealistic in timeframe
Sites of particular importance for biodiversity and ecosystem services are safeguarded more effectively using decentralized and/or traditional resource management	<ul style="list-style-type: none"> Conservation agreements established in at least 3 key biodiversity areas (KBAs) Community conserved areas, community forestry and/or community fisheries established in at least 3 KBAs Strengthen resource use rights of local communities and Indigenous Peoples in at least 5 KBAs Co-management mechanisms for formal PAs established or strengthened in at least 1 KBA 	Outcome and some targets ill-defined/ open to interpretation
Financing is increased for protected area systems, sustainable forestry programs, fisheries management, and ecosystem-based adaptation to climate change		No clear targets for this outcome
Understanding is increased of the contribution of conservation action to human well being	<ul style="list-style-type: none"> A common standard for monitoring the impacts and effectiveness of conservation actions is proposed and debated at regional fora At least 10 peer reviewed journal articles published by graduate students from the region on issues relevant in priority landscapes Baselines for at least 4 supplemental indicators developed At least 5 organizations based in the region are actively engaged in developing long-term regional scale monitoring plans 	Targets may have insufficient logical linkage to outcome