



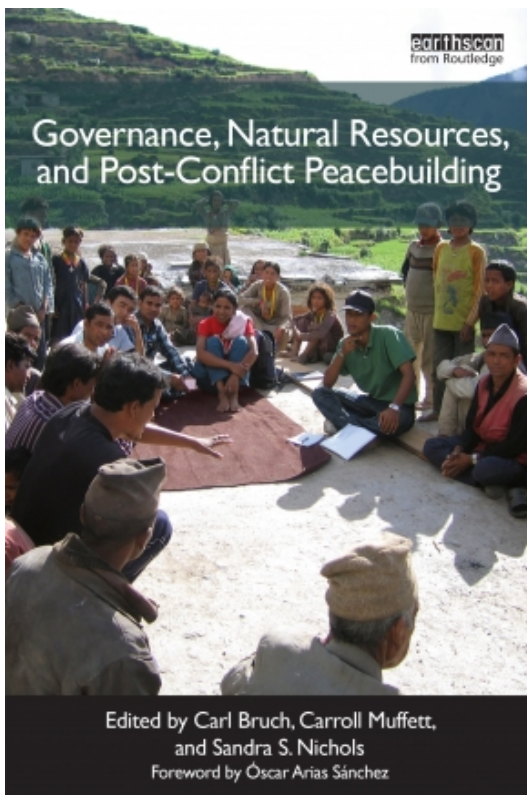
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Legal Liability for Environmental Damage: The United Nations Compensation Commission and the 1990-1991 Gulf War

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Legal liability for environmental damage: The United Nations Compensation Commission and the 1990–1991 Gulf War

Cymie R. Payne

On April 6, 1991, the United Nations received a letter from the Iraqi National Assembly formally accepting the terms of the ceasefire agreement that had been offered by the United Nations Security Council (Security Council), thus ending the 1990–1991 Gulf War.¹ Conflict over shared oil deposits had led Iraq and Kuwait into war.² The dispute was notable for the extent to which natural resources played a role: in addition to serving as a pretext for war, natural resources had been both the instruments and victims of aggression. Tank treads broke up the desert surface; refugees depleted water supplies; and mines, unexploded ordnance, and other remnants of war were ubiquitous. Even more unusual were the intentional assaults on the environment: the retreating Iraqi army ignited more than 600 oil wells and dumped millions of barrels of oil into the sea. Many countries in the Gulf suffered both environmental damage, from oil spills and airborne pollutants from oil well fires, and natural resource depletion, which was caused by the passage of refugees through their territories. A number of governments outside the conflict zone also incurred costs related to the environmental damage by assisting with the response to the oil spills and with the assessment of the pollution from the oil well fires.³

Iraq's invasion of Kuwait violated both the general principles of international law (specifically, the prohibition of aggressive war) and the treaty obligations

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¹ UNSC (1991c, 1991h).

² Wines (1990); Hayes (1990).

³ Iran, Jordan, Kuwait, Saudi Arabia, Syria, and Turkey submitted claims for environmental and natural resource losses; Australia, Canada, Germany, the United Kingdom, and the United States sought compensation for costs incurred in providing emergency environmental response assistance. The United Nations Compensation Commission categorized both types of claims as F4.

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that Iraq assumed when it joined the UN. Under international law, a nation that breaches certain obligations may be obligated to pay financial compensation in reparation for the damage it has caused. Exercising its authority under chapter VII of the UN Charter,⁴ the Security Council established a subsidiary body, the United Nations Compensation Commission (UNCC), to provide financial compensation for losses caused by Iraq's illegal actions. The commission reviewed over 2.6 million claims from individuals, corporations, international organizations, and governments seeking a total of approximately US\$352 billion in compensation; the claimed losses ranged from deaths of family members to the theft of an art collection, damage to commercial property, the cost of extinguishing the oil well fires, and environmental harm.⁵ More than US\$52 billion has been awarded to successful claimants from more than one hundred governments and international organizations. As of April 2014, US\$45.5 billion had been paid for distribution to successful claimants, and only one Kuwaiti claim remained with an outstanding balance.⁶

Historically, a state that caused damage to another state might offer a monetary payment, with or without admitting fault.⁷ In the broader context of international law, compensation serves as a nonpunitive deterrent that provides a remedy to victims.⁸ Claims commissions are a common instrument for war reparations,⁹ but have generally regarded damage (1) as a matter between two states, and (2) as subject to the rules of international law, which typically has excluded the recognition of individuals as claimants and of environmental damage as a compensable loss.¹⁰ Thus, the Security Council's decision to include compensation for pure environmental losses was a new step in international law.¹¹

The UNCC proved to be an innovative institution that implemented a law-based approach to the transition from conflict to peace and to the restoration of war-damaged environmental resources. This chapter illustrates how the UNCC adapted the traditional bilateral compensation commission model to address the substantial environmental damage that resulted from the 1990–1991 Gulf War.

⁴ Chapter VII: Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression.

⁵ Of 2,686,131 total claims resolved, 2,679,044 (that is, 99.74 percent of the claims) were submitted on behalf of individuals (UNCC 2014a; Payne 2011a, table 1.3).

⁶ UNCC (2014b); UNOG (2014).

⁷ For example, in 1999, the United States paid China US\$4.5 million in compensation for deaths that occurred when a North Atlantic Treaty Organization bomb struck the Chinese embassy in Kosovo (Becker 1999).

⁸ Christenson (1995).

⁹ See Bederman (1995). For a comprehensive view of the history of war reparations in international law, see d'Argent (2002).

¹⁰ Caron and Crook (2000), 3–5.

¹¹ Although *environment* and *natural resources* have specific definitions in some contexts, the UNCC practice was to use the terms more or less interchangeably. For a discussion of the scope of *environment*, see Huguenin et al. (2011), Sand (2011), and Payne (2006).



The goal of the chapter is to provide guidance for similar occurrences in the future.¹² The UNCC demonstrates that states can be held accountable for wartime environmental damage, and reveals the benefits that can be obtained from multi-lateral engagement and long-term commitment to environmental restoration.

The chapter is divided into five major sections: (1) a discussion of the conflict that ultimately led to the establishment of the UNCC, with a particular focus on the role of natural resources in Iraq’s decision to invade Kuwait and the resulting environmental damage; (2) a description of the establishment of the UNCC; (3) a consideration of the legal procedures and principles that shaped the work of the UNCC, including the review of environmental claims; (4) an assessment of the UNCC as an instrument of reparations and post-conflict restoration; and (5) a brief conclusion.

THE CONFLICT

Iraq claimed Kuwait as its nineteenth province—and, if one looks at a map, the logic is evident: Iraq has almost no coastal access, which limits its ability to

¹² This chapter focuses on the environmental impacts of war that were within the jurisdiction of the UNCC. It therefore does not address environmental damage within Iraq; other, unrelated aspects of Iraq’s post-conflict regime, such as weapons inspections and the Oil-for-Food Programme; or matters pertaining to the 2003 invasion of Iraq.

establish ports from which to ship its oil exports. Less apparent on a map is the Rumaila oil field, which spans the Iraq-Kuwait border and is one of Iraq's richest oil resources.¹³

Iraq's invasion of Kuwait was motivated by a number of factors, including Iraq's desire to extend its coastline and its view that Kuwait was taking more than its fair allotment of oil from the shared Rumaila oil field. Iraq also had economic motivations—specifically, a substantial debt to Kuwait that dated back to the 1980–1988 Iran-Iraq war, and the belief, as expressed by Iraq's president, Saddam Hussein, that Kuwait was engaging in economic warfare by producing more oil than was allowed by Kuwait's OPEC (Organization of the Petroleum Exporting Countries) quota, and was thereby driving down global oil prices.¹⁴ If Iraq could annex Kuwait as an Iraqi province, all of these concerns would evaporate.

On August 2, 1990, Iraqi forces crossed into Kuwait and occupied the country. The Allied Coalition attempted to negotiate with the government of Iraq;¹⁵ but on January 17, 1991, after negotiations had failed, the coalition began a military offensive that drove Iraqi troops from Kuwait.¹⁶

Three weeks after the withdrawal of Iraq's forces, UN Secretary-General Javier Pérez de Cuéllar sent a mission to assess conditions in Kuwait.¹⁷ Surveying the damage, the UN and other international missions found that more than 600 oil wells in Kuwait and Iraq were burning and gushing out of control, and that more than 6 million barrels of oil had been intentionally poured into the Gulf or had leaked from war-damaged ships¹⁸—exceeding the scale of BP's 2010 Deepwater Horizon oil well blowout in the Gulf of Mexico. Large areas of the desert were covered with inches of oily residue that had hardened into a pavement-like substance known as "tarcrete." Lakes of oil had become traps for birds and other wildlife. Oil spills had wiped out the fauna that played a key role in maintaining water channels, destroying the ecology of the coastal wetlands. In the area of the Iraqi invasion and the ensuing conflict with Allied Coalition forces, the desert had been torn up by military vehicles, road construction, military fortifications, and other defensive structures. Over 1.6 million mines had been

¹³ According to one source, "Once thought to be an independent reservoir, Ratqa [in Kuwait] is actually a southern extension of Iraq's super-giant Rumaila field" (Alexander's Gas and Oil Connections 2003).

¹⁴ Hayes (1990).

¹⁵ The Allied Coalition included Afghanistan, Australia, Bahrain, Bangladesh, Belgium, Canada, Czechoslovakia, Egypt, France, Germany, Honduras, Hungary, Italy, Kuwait, New Zealand, Niger, Oman, Poland, Qatar, Romania, Saudi Arabia, South Korea, Syria, the United Arab Emirates, the United Kingdom, and the United States (Oxford University Press 2001).

¹⁶ Rosenthal (1991).

¹⁷ UNSC (1991d). The mission was in Kuwait from March 16 through April 4, 1991.

¹⁸ Al-Rabeh, Cekirge, and Gunay (1992); World Conservation Monitoring Centre (1991); UNESCO (1991); UNSC (1991d).

laid throughout Kuwait. Shortly after Iraq's August 1990 invasion of Kuwait, refugees had flooded into neighboring countries—notably Jordan, Iran, and Turkey—where they relied on water, grazing lands, and forest resources that were already stretched to capacity.¹⁹

Iraq's environment suffered similar damage, although to a far lesser extent. In the buildup to the invasion, off-road vehicles and the construction of military fortifications damaged Iraq's southern desert. Later, bombing caused oil spills and ignited six oil wells. Targeted bombing of military and industrial installations also resulted in fires and toxic pollution throughout the country.²⁰ The focus of the UNCC, however, was solely on the damage caused by Iraq.²¹

ESTABLISHMENT OF THE UNCC

From the day that Iraq invaded Kuwait, the Security Council turned its attention to the conflict.²² Finally, in March 1991, when the Iraqi armed forces had retreated in the face of military intervention by Allied Coalition forces, the Security Council offered Iraq a ceasefire agreement, Resolution 687, that required weapons inspections, demarcation of the boundary between Kuwait and Iraq, deployment of UN observer forces, the return of Kuwaiti property, and compensation for direct losses, all to be enforced by sanctions; in return, coalition forces would withdraw from Iraq.²³ In the liability provision of Resolution 687, the Security Council recognized environmental harm as a compensable loss for the first time

¹⁹ UNEP (1991a, 1993). Descriptions of the damage inflicted on the environment by Iraq's invasion and occupation of Kuwait, and by subsequent conflict between Iraq and the Allied Coalition, can be read in the UNCC reports, which were based on information submitted by claiming countries, by Iraq, and by international scientific experts, and verified by the UNCC during site visits (UNCC 2001, 2002, 2003, 2004a, 2004b, 2005; Al-Muzaini 1998).

²⁰ Karrar, Batanouny, and Mian (1991), 3; see also UNSC (1991e).

²¹ Costs incurred by the Allied Coalition, including those for military operations against Iraq, were not compensable (UNCC GC 1994b). On the other hand, under Decision 7 of the UNCC Governing Council, Iraq was liable for losses resulting from military operations or threat of military action by either side during the period from August 2, 1990, to March 2, 1991 (UNCC GC 1992a). This aspect of the decision has been controversial; see Frigessi di Rattalma and Treves (1999).

²² UNSC (1990a, which condemned the invasion and demanded Iraq's unconditional withdrawal; 1990b, which imposed sanctions and an arms embargo; 1990c, which authorized member states to use "all necessary means" to terminate the occupation if Iraq did not withdraw by January 15, 1991).

²³ UNSC (1991f, 1991g, 1991h). The border demarcation was completed in 1993, but conflicts over Iraq's access to the Gulf and to shared oil resources may arise in the future (Schofield 1993). In his review of David Malone's *The International Struggle Over Iraq: Politics in the UN Security Council, 1980–2005*, Michael Matheson refers to the resolution of the Iraq-Kuwait boundary and the UNCC as "the most successful UN legal-regulatory programs for Iraq" (Matheson 2008, 690).

in international law.²⁴ Later in 1991, the Security Council established the UNCC to determine and provide compensation.²⁵

The legal basis for the UNCC

Under international law, a state that has breached an international obligation must provide full reparation for any damage caused by its wrongful acts.²⁶ Since Iraq had “manifestly breached international peace and security within the meaning of Chapter VII of the UN Charter,”²⁷ the Security Council had the authority to “decide what measures shall be taken . . . to maintain or restore international peace and security.”²⁸ Through Resolution 687, the Security Council directed the Secretary-General to establish the UNCC;²⁹ paragraph 16 of the resolution identified the basis of Iraq’s liability, noting that “as a result of [its] unlawful invasion and occupation of Kuwait,” Iraq was “liable under international law for any direct loss, damage, including environmental damage and the depletion of natural resources, or injury to foreign Governments, nationals and corporations.”³⁰

Like war crimes tribunals and truth and reconciliation commissions, the UNCC was intended to establish a culture of reconciliation, truth, and justice, but it took a civil rather than a criminal approach.³¹ The UNCC did not levy punitive damages; it was not considered to have a retributive purpose.³² No individuals were called to account for their actions. The government of the Republic of Iraq, which had breached its responsibility to other states, was the sole respondent.³³ Moreover, individuals could make claims for direct losses only through a government or an international organization, which is not the case in most criminal tribunals.³⁴

²⁴ UNSC (1991h). Marco Frigessi di Rattalma and Tullio Treves have observed that “there can be hardly any doubt that [it is] consistent with the customary international law of armed conflicts” to hold Iraq liable for the depletion of natural resources (Frigessi di Rattalma and Treves 1999, 18).

²⁵ UNSC (1991i).

²⁶ ILC (2001).

²⁷ Boisson de Chazournes and Campanelli (2008).

²⁸ UN Charter, chap. VII, art. 39. Veijo Heiskanen’s discussion of the Security Council’s authority shows that this is not an unprecedented use of chapter VII (Heiskanen 2002).

²⁹ UNSC (1991h, 1991d).

³⁰ UNSC (1991h), para. 16.

³¹ See Brownlie (1983), Marauhn (2000), Peterson (2009), and Payne (2011a).

³² ILC (2001); Pfeifer (2002).

³³ Adam Roberts has argued that “the fact that the Iraqi leadership has not so far been held directly responsible, other than through reparations, for its crimes in this regard only confirms the importance of establishing clearly, in some public and unmistakable way, that such wanton destruction of the environment is a serious war crime” (Roberts 1993, 146). See also Marauhn (2000), which laments the fact that because of ambiguities in the interpretations of relevant humanitarian law, the deterrent effect of criminal liability does not apply to environmental damage.

³⁴ For example, individuals are generally permitted to make claims directly to transitional justice institutions that address human rights claims.

In the words of the *Factory at Chorzów* judgment, which has become the touchstone for the scope of reparations in international law, Iraq's obligation was to "as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed."³⁵ Although the UNCC provided only financial compensation to successful claimants, its environmental claims program adopted additional accountability measures to ensure that awarded funds would be used for their assigned purpose: to restore damaged natural systems.

The structure and scope of the UNCC

The Governing Council, which was made up of the fifteen states sitting on the Security Council at any given time, was the UNCC policy-making body;³⁶ it had the authority to approve recommendations for compensation, manage and make disbursements from the Compensation Fund, appoint commissioners, and establish procedural rules.³⁷ The UN Secretary-General appointed an executive secretary to oversee a secretariat of lawyers, accountants, paralegals, financial experts, and other staff, all operating under UN staff regulations and rules.³⁸ The secretariat carried out the directions of the Governing Council and managed the process, working with the commissioners, the claimants, outside experts, and representatives of the government of Iraq. With respect to legal style, the commission's approach was inquisitorial rather than adversarial; as such, the approach emphasized the role of the secretariat, which was tasked with ensuring the availability of the information and evidence that were necessary to review the claims.³⁹

To ensure the independence of the claims review process, three-member panels—distinguished experts in law and other fields, who served in their personal capacity rather than as representatives of particular countries—reviewed the evidence and arguments submitted by the claimants and by Iraq, and recommended to the Governing Council which claims had been proved and the amount of compensation to be awarded for them. These fifty-nine commissioners, who were recommended by the executive secretary, nominated by the Secretary-General, and appointed by the Governing Council, were from forty different countries.⁴⁰ The commissioners on the environmental panel were Thomas Mensah, from

³⁵ *Factory at Chorzów* (Merits) Judgment No. 13, 1928, P.C.I.J., Series A, No. 17, 29.

³⁶ It was decided that the veto, a prerogative of the five permanent members of the Security Council, would not apply in the Governing Council (UNSC 1991b). Although it was not required, consensus decision making became the practice of the Governing Council (UNCC GC 1992b). Because neither Iraq nor Kuwait was a member of the Security Council during the time that the UNCC was active, neither was a member of the Governing Council.

³⁷ UNCC GC (1992b).

³⁸ UNSC (1991h). The UNCC employed fifty-nine commissioners and more than 635 staff, of whom 206 were lawyers (Raboin 2005).

³⁹ Heiskanen (2002).

⁴⁰ UNCC (n.d.).

Ghana, who was the chairman; José Allen, from the United States; and Peter H. Sand, from Germany.⁴¹

The Compensation Fund was created and replenished by a fixed percentage of Iraq's oil revenues, although the original amount—30 percent—was reduced over time.⁴² The fund covered the costs associated with the commission, the awards to successful claimants, and the costs of Iraq's legal representatives. It also paid for fees to experts who were consulted by the commission and Iraq; for the environmental claims, these were chiefly technical and scientific experts.⁴³

The commission began its work in 1991 and made its first payments to successful claimants in 1994. Initially, operations and claim awards were paid from funds provided by the Working Capital Fund of the United Nations, reimbursable voluntary contributions from governments, and Iraqi funds frozen during the conflict.⁴⁴ In 1996, a mechanism to transfer funds from Iraq was put in place.⁴⁵ As of April 2014, Iraq was continuing to pay into the Compensation Fund, and the fund was continuing to pay the last outstanding claim.⁴⁶ At that point, the UNCC had paid out approximately US\$45.5 billion to claimants in all claim categories.⁴⁷

The UNCC deferred review of the environmental claims to the end of the work program, in part because of uncertainty about whether there would be sufficient funds to cover the more traditional claims.⁴⁸ The environmental claims team began its formal review of claims in 2000 and completed it in 2005, at

⁴¹ The environmental team included thirteen lawyers from ten countries, five paralegals, and one secretary, all of whom were supervised by a chief of section—who served, in turn, under the chief of the legal services branch.

⁴² UNSC (1991a, 1991j, 1995, 2000). Security Council resolutions 1483 and 1546 ended the Oil-for-Food Programme, replaced it with the Development Fund for Iraq, and reduced Iraq's contribution to the UNCC to 5 percent of oil revenues (UNSC 2003, 2004). The 5 percent contribution was continued by Security Council Resolution 1956 (UNSC 2010); oversight of control over, reporting about, and use of Iraq's oil export revenues was eventually transferred to Iraq's Committee of Financial Experts (UNSC 2012).

⁴³ Regarding funds for Iraq's consultants, see UNCC GC (2000).

⁴⁴ UNCC (2009).

⁴⁵ The mechanism was created pursuant to Security Council Resolution 986, which authorized states to permit import of Iraqi petroleum and petroleum products "sufficient to produce" a maximum value of US\$1 billion every ninety days (UNSC 1995, para. 1); established an escrow account, into which the full payment for each purchase of Iraqi petroleum or petroleum products was placed; and directed funds to be used for Iraq's humanitarian needs, the UNCC, and other purposes.

⁴⁶ UNCC (2014b). Initially, 30 percent of Iraq's oil revenues went into the Compensation Fund; the amount was subsequently reduced to 25 percent through a political compromise (Schneider 2005, 325, 334). Security Council Resolution 1483 reduced the percentage of Iraq's oil revenues paid into the Compensation Fund from 25 percent to 5 percent (UNSC 2003, 2008; *Arab Times* 2009), where it remains.

⁴⁷ UNCC (2014b); UNOG (2014).

⁴⁸ Caron (2000). The first Governing Council decisions, issued in August 1991, assigned priority to humanitarian claims; during the first few years of the UNCC program, more than 2 million individuals received compensation (UNCC GC 1991a). See also UNSC (1991a), UNCC GC (1991b), and UNCC (2005), para. 2.

which point the UNCC, claimant governments, and the government of Iraq created a program to oversee the expenditure of the environmental compensation awards.

The claims

All UNCC claims were divided into categories (A through F), according to the nature of the claimant (individual, corporate, government) and the subject matter of the claim (for example, departure from Kuwait or Iraq, serious personal injury or death, environmental damage).⁴⁹ Environmental claims submitted by governments and international organizations were assigned to the F4 subcategory.⁵⁰ F4 claims included the major governmental claims for damage caused by oil spills and oil well fires; refugee impacts; and mine laying, ordnance disposal, and other military activities. The category also included the costs associated with public health screenings.

Government claims for damage to the environment, depletion of natural resources, and related matters amounted to approximately US\$85 billion, roughly 35 percent of the total amount claimed by governments.⁵¹ Of the 168 environmental claims, 109 were awarded US\$5.3 billion in compensation—a little over one-third of the total award to governments.

Environmental claims were divided into five installments for review. So that the results of monitoring and assessment activities funded by the compensation could be taken into consideration in the review of the substantive claims, the first installment consisted of the 107 claims for monitoring and assessing environmental damage. Of approximately US\$1 billion claimed, Iran, Jordan, Kuwait, Saudi Arabia, and Syria were awarded a combined amount of more than US\$243 million for activities that included shoreline surveys of oil-spill damage (Kuwait and Saudi Arabia); a study of bioaccumulation of oil spill-related pollutants in fisheries stocks (Iran); evaluation of damage to cultural heritage sites caused by oil fire pollutants (cities in Iran and Syria); and studies of pollution in ground-water and springs caused by the presence of refugees (Jordan).⁵²

⁴⁹ Governments and international organizations (including the United Nations Development Programme, the UN High Commissioner for Refugees, and the United Nations Relief and Works Agency) filed claims directly with the UNCC. Individuals filed claims through the governments of the countries where they were residents or nationals, and corporations filed through the states in which they were incorporated. Individuals who could not file claims through a government (a category that included some Palestinians and refugees) filed their claims through international organizations (Heiskanen 2002; Payne 2011a). The governments and international organizations then filed consolidated claims with the UNCC and were responsible for distributing awards to the individual or corporate claimants (UNCC GC 1994a).

⁵⁰ Claims filed by corporations were categorized as E claims. E1 claims were specific to losses in the oil sector, including the depletion of oil reserves through theft and damage.

⁵¹ In principle, international organizations could have claimed on behalf of the environment, but none did (Boisson de Chazournes 1998).

⁵² UNCC (2001).

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The second installment of environmental claims consisted of thirty claims, from governments both within and outside the conflict zone, for reimbursement of response costs. The largest of these claims came from Kuwait, which was awarded US\$688 million for the cost of removing and disposing of over 1.6 million landmines and more than 109,000 metric tons of other ordnance. Australia, Canada, Germany, the United Kingdom, and the United States sent experts and materiel to assist with oil-spill response and damage assessment; the UK claim included funds for a study, by the International Council for Bird Preservation, of oil-spill impacts on migratory wading birds. The United States also claimed costs associated with the collection and analysis of air-quality data and the development of computer models to predict the impact of air pollution from the oil well fires.⁵³

The most challenging claims were those for the cost of (1) environmental remediation and restoration, and (2) the depletion of natural resources.⁵⁴ The striking difference (shown in table 1) between the amount claimed and the amount awarded is explained largely by two factors: the difficulty of proving causation and damage, and the claimants' significant overstatement of remediation costs. For example, Iran claimed more than US\$13.5 billion for damage to its terrestrial and marine resources, cultural resources, and public health, but was awarded only US\$27 million, largely because of insufficient evidence of damage or causation.⁵⁵ Saudi Arabia, which sought nearly US\$20 billion for treatment of cardiovascular, respiratory, and other diseases, submitted the single largest claim to fail on these grounds. The environmental panel found that although the environmental effects of the conflict, including increased pollution from the oil well fires in Kuwait, may have influenced the health of the population in the areas of Saudi Arabia nearest the conflict, there was insufficient evidence provided of actual effects and their association with the war.⁵⁶ It should be noted that a claimant's failure to provide sufficient evidence of environmental damage might have been because the claim was ill-founded or for other reasons, such as a failure to collect appropriate evidence during and immediately after the conflict.

In many cases, even though the environmental panel found sufficient evidence to substantiate a loss and its causal link to Iraq's invasion of Kuwait, the valuation methods the panel used to calculate the recommended compensation

⁵³ UNCC (2002).

⁵⁴ *Remediation and restoration* are defined under U.S. and European Union law to refer to actions that are designed (1) to return damaged natural resources to the condition they were in before the injury and (2) to offset the loss during the period before the natural resources are fully restored. See Huguenin et al. (2011), 74. The UNCC applied its own internal rule: Governing Council Decision 7 identifies the types of injury that are compensable to include "measures . . . taken to clean and restore the environment" and "depletion of or damage to natural resources" (UNCC GC 1992a, para. 35).

⁵⁵ UNCC (2004a, 2005).

⁵⁶ UNCC (2005).

Table 1. United Nations Compensation Commission claims, by category

| <i>Category</i> | <i>Number of claims resolved</i> | <i>Number of resolved claims awarded compensation</i> | <i>Compensation sought by claims resolved (in millions of US\$)</i> | <i>Compensation awarded (in millions of US\$)^a</i> | <i>Net compensation paid (in millions of US\$)^b</i> |
|---|----------------------------------|---|---|---|--|
| A, B, C, D: Claims from individuals | 2,679,044 | 1,539,229 | 31,519 | 11,698 | 11,657 |
| E: Claims from corporations | 6,571 | 4,048 | 78,736 | 26,297 | 19,412 |
| E/F, F1, F2, F3: Claims from governments and international organizations that were not related to the environment | 348 | 233 | 157,374 | 9,126 | 9,126 |
| F4: Claims from governments that were related to the environment and natural resources | 168 | 109 | 84,904 | 5,262 | 5,260 |
| Total | 2,686,131 | 1,543,619 | 352,533 | 52,383 | 45,455 |

Sources: UNCC (2014a); Payne (2011a, table 1.3).

Notes:

a. Figures reflect corrections to awards included in article 41 reports.

b. Figures in this column are as of April 2014 and represent amounts made available and paid to claimant governments and submitting entities. Figures are net of undistributed funds returned to the United Nations Compensation Commission (UNCC).

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award differed from those proposed by the claimants.⁵⁷ In one of the largest remediation claims, Saudi Arabia sought more than US\$4.7 billion for remediation of more than 600 kilometers of its Gulf shoreline.⁵⁸ Although most of the 6 to 8 million barrels of oil was dumped by the Iraqi military or spilled from damaged ships near the coast of Kuwait, the current carried the oil to the waters and shoreline of Saudi Arabia, where it contaminated wildlife habitat, formed asphalt pavements in the tidal zone, and trapped oil within shoreline sediments. The results of the shoreline survey, which Saudi Arabia executed with funds awarded by the UNCC in the first F4 installment, were comprehensive and convincing: combined with scientific reports from the time of the spill, the survey made it possible to distinguish between war-related oil-spill damage and the usual background oil contamination found in the region. Saudi Arabia claimed, however, that it would cost US\$4.7 billion to remediate the damage by removing visibly contaminated sediment, treating it with high-temperature thermal desorption,⁵⁹ replacing the excavated sediment with clean material, and finally revegetating the salt marshes.⁶⁰ Finding that the proposed approach would pose “unacceptable risks of adverse environmental impacts,” the environmental panel awarded US\$463.3 million—approximately 10 percent of the claimed amount—on the basis of an alternative approach that would “target the impediments to ecological recovery and accelerate natural recovery” without the risks that would have resulted from the proposed approach.⁶¹

Because of the nature of the loss or the identity of the claimant, certain losses related to the oil sector, damage to privately owned land, and damage to cultural artifacts were assigned to other categories. For example, because a claim for losses caused by the mining of and damage to a private garden was filed by an individual, it was assigned to the D category.⁶² Similarly, when the Kuwait Oil Company sought US\$951.7 million for the cost of extinguishing the oil well fires, sealing the wells, and repairing Kuwait’s oil fields, the claim was considered a corporate claim and categorized as E1.⁶³ Other oil sector claims in the E1 category sought compensation for the loss of production and sales; theft or loss of crude oil and gas caused by oil spills, well blowouts, or well fires; and

⁵⁷ For a discussion of the valuation methods used by the expert consultants who advised the environmental panel, see Huguenin et al. (2011).

⁵⁸ UNCC (2003). Many scientific reports assessing the damage from the oil spill were published in a special issue of *Marine Pollution Bulletin* (Price and Robinson 1993); other useful references include the American Petroleum Institute (1995); Hardy et al. (1992); and Krupp, Abuzinada, and Nader (1996).

⁵⁹ The UNCC glossary defines *high-temperature thermal desorption* as a process that uses heat “to separate contaminants from contaminated material” (UNCC 2003, 56). In the course of that process, “water and organic contaminants are volatilized from the material. The volatilized contaminants usually require further treatment” (UNCC 2003, 56).

⁶⁰ UNCC (2003).

⁶¹ UNCC (2003), 33.

⁶² UNCC (1998).

⁶³ UNCC (1996); UNCC GC (1992a).

reconstruction costs.⁶⁴ Finally, it is important to note that the claims presented to the UNCC do not reflect the full extent of environmental damage from the 1990–1991 Gulf War: some nations that very likely suffered environmental effects from the war chose not to file claims.⁶⁵

LEGAL PRINCIPLES AND PROCEDURES

Nothing quite like the UNCC had been attempted before, but the commission was created at a time of experimentation with international compensation bodies—including the Iran-United States Claims Tribunal (1980–), for claims related to the 1979 Iranian revolution; the German Forced Labour Compensation Programme (2000–2007), for claims related to World War II; and the Eritrea-Ethiopia Claims Commission (2000–2009), for claims related to 1997–1998 border conflicts.⁶⁶ The creators of the UNCC learned from the experiences of their predecessors, just as subsequent post-conflict reparation programs have looked to the principles and procedures developed by the UNCC.⁶⁷

Applicable law

The commissioners appointed to the environmental panel had the following tasks:

- To decide whether the evidence supported the statements of the claimants.
- To determine whether Iraq's invasion and occupation of Kuwait directly caused the losses supported by the evidence.
- To assign a monetary value to the loss.

Security Council resolutions and Governing Council decisions were the primary source of law.⁶⁸ Under procedural rules set by an early decision of the Governing Council, the commissioners had the option of relying “on the relevant UNCITRAL [United Nations Commission on International Trade Law] Rules” or seeking direction from the Governing Council.⁶⁹ Where Security Council

⁶⁴ UNCC (2000). At least one claim sought compensation for the looting of natural resources by Iraqi forces, asserting that “one part of a cargo of sulphur that KPC [Kuwait Petroleum Corporation] had sold to Moroccan buyers was seized by the Iraqi military during the invasion” (UNCC GC 1999, 78).

⁶⁵ Farouk El-Baz and Ragaa Mohamed Makharita have written about the participation of Bahrain, Oman, Qatar, and the United Arab Emirates in a scientific fact-finding mission; none of these countries filed environmental claims (El-Baz and Makharita 1994).

⁶⁶ IOM (n.d.); PICT (n.d.); Foundation EVZ (n.d.).

⁶⁷ Bruch and Fishman (2011).

⁶⁸ UNCC GC (1992b).

⁶⁹ UNCC GC (1992b), art. 43. UNCITRAL's mandate is to further the harmonization and unification of the law of international trade.

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resolutions and Governing Council decisions were not sufficient, the panel turned to international law. For example, in deciding that the use of a novel method of valuing nonmarket environmental resources was appropriate, the panel referred to the principles stated in the influential *Trail Smelter* arbitration award.⁷⁰ In some instances, national legal systems supplied additional direction.⁷¹

Governing Council Decision 7 provided a nonexclusive list of criteria for “direct loss” for which Iraq was liable.⁷² The criteria for environmental damage and depletion of natural resources included “any loss suffered as a result of . . . [m]ilitary operations or threat of military action by either side during the period 2 August 1990 to 2 March 1991” and losses or expenses resulting from the following:

- (a) Abatement and prevention of environmental damage, including expenses directly relating to fighting oil fires and stemming the flow of oil in coastal and international waters;
- (b) Reasonable measures already taken to clean and restore the environment or future measures which can be documented as reasonably necessary to clean and restore the environment;
- (c) Reasonable monitoring and assessment of the environmental damage for the purposes of evaluating and abating the harm and restoring the environment;
- (d) Reasonable monitoring of public health and performing medical screenings for the purposes of investigation and combating increased health risks as a result of the environmental damage; and
- (e) Depletion of or damage to natural resources.⁷³

Procedures

UNCC procedures were initially designed to support the efficient and rapid review of claims. They evolved over the life of the institution, particularly with respect to the environmental claims.

Finality and correction of decisions

The decisions of the Governing Council were final and not subject to appeal or review.⁷⁴ However, panel reports could be corrected for “computational, clerical, typographical or other errors.”⁷⁵ Perhaps not surprisingly, some claimants tried to avail themselves of the correction mechanism to seek review of an unfavorable

⁷⁰ UNCC (2005). Reports of International Arbitral Awards, *Trail Smelter Case* (United States/Canada), 16 April 1938 and 11 March 1941, vol. III, 1905–1982. http://legal.un.org/riaa/cases/vol_III/1905-1982.pdf.

⁷¹ UNCC (2005).

⁷² UNCC GC (1992a).

⁷³ UNCC GC (1992a), paras. 34–35.

⁷⁴ UNCC GC (1992b).

⁷⁵ UNCC GC (1992b), art. 41.

decision. Some of these efforts resulted in corrections, but only for the limited reasons stated in the rules.

Nonexclusivity and prohibition of double recovery

The Secretary-General foresaw the possibility that the UNCC claims procedure would not be an exclusive remedy,⁷⁶ and the Governing Council developed procedures to address this issue.⁷⁷ As part of the UNCC process, Iraq and the governments submitting claims (on their own behalf or for corporate or individual claimants) were asked to state whether claims had been made or awards had already been obtained against Iraq in domestic courts or other forums; as each claim was reviewed, the secretariat then asked the claimant to confirm whether compensation for the claimed loss had been sought in another forum. For instance, when the UNCC discovered that the Gulf Peace Fund had reimbursed a claimant for a portion of its oil-spill response costs, the UNCC reduced its award commensurately.⁷⁸

Evidence: Standards, responsibility, and sources

The UNCC's evidentiary standards reflected the monetary value and complexity of the different claim categories, and varied from minimal evidentiary requirements for the humanitarian claims to rigorous requirements for the environmental claims.⁷⁹ A large number of the individual claims were of low monetary value, but their resolution was of great urgency to the (generally low-income) claimants, and the factual bases were similar from one case to another. The environmental claims, in contrast, were high in monetary value, few in number, and analytically complex, and the evidentiary requirements were correspondingly exacting.

Accordingly, in order to rapidly process over 2.6 million humanitarian claims, to get compensation to claimants, and to relieve hardship among the many migrant workers who had lost their savings and jobs as a result of the Iraqi invasion, the UNCC developed a mass claims procedure that provided fixed, relatively low amounts of compensation but required only minimal evidence from the claimant.⁸⁰ This approach also took into account the unusual difficulties that many individual

⁷⁶ UNSC (1991f), para. 22.

⁷⁷ The Governing Council provided a procedure for withdrawal of claims in such cases, or for any other reason: "A claim pending before the Commission may be withdrawn at any time by the Government or entity that submitted the claim to the Commission. In any case where the claim has been paid, settled or otherwise resolved, it shall be withdrawn" (UNCC GC 1992b, art. 42). See also UNCC GC (1992c).

⁷⁸ See, for example, UNCC (2002), paras. 35 and 163; and Van Houtte, Das, and Delmartino (2006), 374.

⁷⁹ UNCC GC (1992a), para. 37.

⁸⁰ The evidence required for these claims was "the reasonable minimum . . . appropriate under the particular circumstances of the case" (Gibson 1995, 168n6).

claimants would have faced if they had been compelled to produce evidence of losses caused by the conflict.⁸¹ Individuals seeking larger sums (up to US\$100,000) had to provide somewhat more evidence than those who had made small claims, but claims over that amount—a category that included all environmental claims—required even more: “documentary and other appropriate evidence sufficient to demonstrate the circumstances and amount of the claimed loss.”⁸²

For the environmental claims, the evidence had to be “sufficient to show that there has been a loss of or damage to natural resources as alleged and, if so, whether such loss or damage resulted directly from Iraq’s invasion and occupation of Kuwait.”⁸³ Thus, perhaps the most difficult challenge for environmental claimants was providing evidence of the nature, circumstances, and amount of damage attributable to Iraq. Providing evidence of causation is often a problem in domestic environmental litigation, and it was compounded here by the absence of baseline data about conditions before the conflict. As noted earlier, insufficient evidence was the chief reason that a large number of environmental claims did not receive an award.

Claimants were responsible for “submitting documents and other evidence,”⁸⁴ but the secretariat and the panels could request further information from claimants, Iraq, or expert consultants. The commissioners on the environmental panel, the panel’s expert consultants, and the secretariat all used site visits as an additional means of verifying losses. Reports from the peer-reviewed scientific literature and reports from international organizations, such as the United Nations Environment Programme (UNEP), were also helpful in this regard.

Iraq’s role

Over the life of the institution, the relationship between Iraq and the UNCC evolved in such a way that Iraq played a far more substantial role in the review of environmental claims than it had for previous claims.⁸⁵ When the UNCC was established, Saddam Hussein was not only still in control of Iraq, but still claimed Kuwait, and Iraq’s relationship with other countries in the region remained tense and hostile.⁸⁶ Although the Iraqi parliament formally accepted the terms of Security Council Resolution 687, which included the UNCC, it did so reluctantly—indeed, antagonistically.⁸⁷ As the years passed, other nations (including members of the Governing Council) engaged more with Iraq, politically and

⁸¹ Kazazi (1999), 1, 219, 221.

⁸² UNCC GC (1992b), art. 35(3).

⁸³ UNCC (2005), para. 56.

⁸⁴ UNCC GC (1992b), art. 35.

⁸⁵ For two perspectives on Iraq’s evolving role in relation to the UNCC, compare Klee (2011) and Lalanath de Silva, “Reflections on the United Nations Compensation Commission Experience,” in this book.

⁸⁶ Lewis (1992).

⁸⁷ UNSC (1991a, 1991h).

commercially,⁸⁸ and Iraq shifted from an uncooperative stance to a more constructive approach.⁸⁹

In the years before the UNCC started processing the environmental claims, Iraq was given limited access to claims materials and had few opportunities to directly state its views to the commissioners. Iraq protested that it had not been given sufficient time or access to evidence to prepare a defense. The procedural limitations and deadlines about which Iraq complained were intended to expedite the processing of the claims.⁹⁰ For example, the mass claims-processing techniques used for humanitarian claims did not include oral proceedings. Nevertheless, beginning in 1995, several panels held oral proceedings for large and complex claims. The results did not improve the relationship between Iraq and the commission, however: often, Iraq either failed to appear at the proceedings or used them as an opportunity to make political statements—behavior that, in either case, frustrated the commissioners.⁹¹

One regular avenue through which Iraq could present its views was the periodic (generally quarterly) report from the executive secretary to the Governing Council. The report provided Iraq and all claimant governments with information about the number and nationality of claimants, the amount of compensation sought, and significant legal and factual issues raised by the claims. The “Article 16 reports,” as they were called, also invited Iraq and other governments to provide views and information to the executive secretary;⁹² all such information was then considered by the commissioners during their review of the claims.⁹³

Compared with the earlier phases of the UNCC’s program, during which Iraq’s participation had been restricted, Iraq and the claimant countries were on a more even footing during the environmental claim review. This shift was appropriate, given the limited number of complex, high-value environmental claims: in the case of environmental claims, Iraq had both more to lose and more to contribute to the analysis. The change in the UNCC posture toward Iraq took its most definitive turn in 2000, when the Governing Council assessed its procedures and decided to give Iraq greater access to the commission.⁹⁴ This decision coincided with the first formal meetings of the environmental panel.

⁸⁸ Miller (2000).

⁸⁹ Allen (2011); Wilde (2011).

⁹⁰ Raboin (2005).

⁹¹ See, for example, UNCC (1996), para. 7; and UNCC (2000), para. 21: “The [E1] Panel notes with some disappointment, however, that Iraq chose not to address the Panel on the issues presented by the claims, as specifically requested by the Panel, but rather chose to address its comments solely to matters over which the Panel has no control and not to address the substance of the claims. The Panel, therefore, terminated the oral proceedings following Iraq’s presentation.” On the other hand, the E1 panel also stated that it was “assisted by some of the responses” filed by the government of Iraq (UNCC 2000, para. 143).

⁹² UNCC CG (1992c); Heiskanen (2002).

⁹³ See, for example, UNCC (2003), para. 55.

⁹⁴ UNCC GC (2000).

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Several of the new measures were directed at the environmental program in particular. First, oral proceedings were held for every group of claims reviewed by the environmental panel, allowing Iraq to make its case directly to the commissioners.⁹⁵ Second, funds (eventually amounting to US\$14 million) from the Compensation Fund were made available to Iraq to hire lawyers and technical experts to prepare a response to the large and complex environmental claims.⁹⁶ The aim of this measure was to “facilitate the promotion of legitimate interests of Iraq with respect to ‘F4’ claims, which give rise to particular questions due to their complexity and the limited amount of relevant international practice.”⁹⁷ For their part, Iraq’s lawyers proposed to their client “that a confrontational approach would not be productive and decided instead to approach the process as a joint, cooperative endeavor”; and as noted by one of the lawyers representing Iraq, “to Iraq’s credit . . . it adopted this cooperative strategy” in responding to the environmental claims.⁹⁸

Legal principles

The UNCC environmental decisions focused on the protection and restoration of environmental integrity and were based on the principles of precaution, common concern, obligations to future generations, and the value of ecosystems, in addition to long-standing principles of international law. In making awards for environmental monitoring and assessment costs, the UNCC acknowledged the precautionary need to identify potential risks in order to plan future action, especially for the protection of human health, and to obtain information that could inform the substantive claim review.⁹⁹ In the words of the environmental panel, the mitigation of environmental damage is the duty of injured states; it is “a necessary consequence of the common concern for the protection and conservation of the environment, and entails obligations towards the international community and future generations.”¹⁰⁰

This section discusses decisions that addressed the following issues:

- The valuation of “pure” environmental damage (harm to natural resources that do not have a market valuation).
- The definition of the legal concept of “significance” in ecological terms.
- The recognition of costs stemming from environmental solidarity (assistance with emergency response provided by governments outside the region).

⁹⁵ The environmental panel ordered oral proceedings for the first installment in October 2000; the Governing Council issued its decision requiring oral proceedings in December 2000.

⁹⁶ Previously, the sanctions program had restricted Iraq’s use of its own funds to hire non-Iraqi experts, although Iraq had of course been assisted by Iraqi scientists and lawyers (UNCC GC 2001a, 2004b; UNCC 2005, para. 783).

⁹⁷ UNCC (2005), para. 783.

⁹⁸ Michael Schneider, Iraq’s lead counsel for the environmental claims, provided this insight into Iraq’s legal strategy (Schneider 2005); see also Wilde (2011).

⁹⁹ Sand (2005).

¹⁰⁰ UNCC (2003), para. 42.

- Oversight of the expenditure of awards, to ensure that the claimed environmental damage will be remediated.

Compensation for pure environmental damage

In post-conflict contexts, alternative forms of reparation—including restitution, compensation, and satisfaction—are available, according to the rules of international law that are accepted by most nations. For environmental damage, *restitution* may be used where the loss consists of territory or property that can be returned.¹⁰¹ *Satisfaction*, the “remedy for those injuries . . . which amount to an affront to the State,” takes the form of “an acknowledgement of the breach, an expression of regret, a formal apology or another appropriate modality,”¹⁰² and is rarely appropriate for environmental or natural resource losses. *Compensation*, the form of reparation chosen by the UNCC, is a financial transfer that is understood, in the International Law Commission’s statement of the law, to “cover any financially assessable damage.”¹⁰³

It is difficult, however, to assign financial value to pure environmental damage. While the government of Iraq agreed that reasonable costs of remediation or restoration could be compensated, it argued that the loss of natural resources that are not traded in the market is not “financially assessable,”¹⁰⁴ and that there is no legal justification for compensating such losses. But this legal interpretation ignores the International Law Commission’s further explanation that “the qualification ‘financially assessable’ is intended to exclude compensation for . . . the affront or injury caused by a violation of rights not associated with actual damage to property or persons.”¹⁰⁵ In other words, the definition of *financially assessable* is not intended to exclude losses to nonmarket environmental and natural resources, which are categorized as “actual damage.” The environmental panel stated that “there is no justification for the contention that general international law precludes compensation for pure environmental damage.”¹⁰⁶

The panel observed that it was “entitled and required” to determine appropriate compensation, while recognizing that putting a monetary value on nonmarket natural resources entails some uncertainties.¹⁰⁷ In several cases, the panel addressed the valuation problem by accepting the claimants’ use of habitat equivalency analysis (HEA), which sets the value of the loss as the cost of environmental projects designed to replace ecosystem services previously provided by irremediably damaged natural resources.¹⁰⁸ The panel’s application of HEA

¹⁰¹ ILC (2001).

¹⁰² ILC (2001), art. 37(2).

¹⁰³ ILC (2001), art. 36. See also Gabčíkovo-Nagymaros Project (Hungary/Slovakia), Judgment, I.C.J. Rep. 1997 (September 25), 7, 81, para. 152; and Factory at Chorzów, 29.

¹⁰⁴ UNCC (2005), para. 46.

¹⁰⁵ ILC (2001), 99.

¹⁰⁶ UNCC (2005), para. 58.

¹⁰⁷ UNCC (2005), para. 80.

¹⁰⁸ Payne (2005).

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in a number of claims demonstrates a valuation procedure for ecosystem services that can be relied on in future proceedings to protect and restore environmental resources that are not traded in the market.

- Jordan used HEA to calculate that damage to rangeland and wildlife reserves from vehicular traffic, overgrazing by refugees' livestock, and refugees' use of plants for fuel would require compensation of US\$2.4 billion. However, implementing the project as proposed would have required more land than was available in Jordan.¹⁰⁹ The environmental panel accepted the HEA approach in principle, and, in consideration of the limited land available, awarded US\$160.3 million. This amount reflected the costs of an alternative program in which rangeland users and managers would cooperatively manage the resource.¹¹⁰
- On the basis of HEA, Kuwait sought US\$194.1 million in compensation for the disruption of ecological services and human activities in desert areas.¹¹¹ In an approach that was similar to that used to compensate claims for damage to natural resources from oil spills in the United States, claimants were permitted to submit separate claims, for a given site, for damage assessment costs, remediation costs, and the value of lost use during the period between the occurrence of the damage and full restoration of the natural resources. In the first and fourth installments of environmental claims, Kuwait had been awarded approximately US\$2.27 billion for damage assessment and remediation costs.¹¹² The environmental panel observed that Kuwait's use of HEA was appropriate for the valuation of interim losses, but that its calculation of the loss was overstated. No further award was recommended, as the panel concluded that the UNCC's previous awards for remediation of the same sites had fully compensated the losses.¹¹³
- In the third installment of the environmental claims, Saudi Arabia had received an award for the cost of remediating coastal damage caused by oil spills, but it was significantly discounted from the claimed amount, in part because the

¹⁰⁹ UNCC (2005).

¹¹⁰ The amount awarded also reflected a reduction to account for "inadequacies in the information provided by Jordan and also the fact that Jordan failed to take steps to mitigate the damage, particularly by failing to reduce grazing pressure on the rangelands" (UNCC 2005, para. 363).

¹¹¹ UNCC (2005). Desert areas were damaged by tarcrete, windblown sand, dry oil lakes, wet oil lakes, oil-contaminated piles, oil-filled trenches, oil spills, military fortifications, and open detonation and open burning of ordnance. Ecological services that were harmed included soil stabilization, soil microcommunities, wildlife habitat, and vegetative diversity; human activities that were temporarily diminished included animal grazing and desert camping (a popular and culturally important form of recreation).

¹¹² Kuwait submitted claims for the costs of (1) assessing environmental damage from oil lakes that had resulted from oil well fires and evaluating technology to remediate the damage (UNCC 2001); and (2) cleaning and restoring terrestrial damage from oil wells, pipelines, trenches, mines, and other remnants of war (UNCC 2004b, 2005).

¹¹³ UNCC (2003).

environmental panel found that some of the damaged wetlands were too sensitive for highly intrusive restoration and should be left to recover more slowly, through natural processes.¹¹⁴ To address the loss of ecosystem services that would not be fully compensated by that award, Saudi Arabia proposed constructing ten marine and coastal preserves—but the panel, applying HEA, considered that two preserves would sufficiently compensate for damage that had not already been addressed.¹¹⁵ Thus, the panel recommended an award of approximately US\$46.1 million to address oil-spill damage to shoreline resources, including salt marshes and mangroves, which the panel felt had not been fully compensated by previous remediation awards.¹¹⁶

Threshold of significant environmental damage

Although international law calls for full reparation of all consequences of a state's illegal acts,¹¹⁷ Iraq had argued that “damage resulting from the invasion and occupation of Kuwait is not compensable unless it reaches the ‘threshold’ that is generally accepted in international law for compensation in cases of state responsibility for transboundary environmental damage”—which, according to Iraq, was damage that is at least “significant.”¹¹⁸ Iraq's argument echoed the restrictive requirements of two international agreements on armed conflict: (1) the Additional Protocol I to the 1949 Geneva Conventions, which bans actions that are intended to cause “widespread, long-term and severe damage to the natural environment”; and (2) the Environmental Modification Convention (ENMOD), which prohibits the use of “widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.”¹¹⁹ As Iraq was not a party to either treaty, neither would have been applicable to Gulf War environmental damage. Had the Additional Protocol I or ENMOD standards been applied, of course, the impacts of the oil spills, oil well fires, and other effects of the conflict would have met the threshold. The environmental panel had to identify an alternative legal standard.¹²⁰

¹¹⁴ UNCC (2003).

¹¹⁵ UNCC (2003).

¹¹⁶ UNCC (2005).

¹¹⁷ The Factory at Chorzów case provides the touchstone definition of *reparation*: “reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed” (Factory at Chorzów, 29).

¹¹⁸ UNCC (2003), para. 33.

¹¹⁹ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts, June 8, 1977, 1125 UNTS 3, art. 35, paras. 1 and 3; art. 55; Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, December 10, 1976, 1108 UNTS 151, art. I, para. 1. For a discussion of these treaties and the 1990–1991 Gulf War, see Roberts (1993).

¹²⁰ Allen (2011).

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The panel found the relevant legal rules to determine admissible environmental claims in Security Council Resolution 687 and in Governing Council decisions.¹²¹ In reviewing claims for remediation of Kuwait's deserts and Raudhatain aquifer, and of Saudi Arabia's coastline, the panel, quoting Resolution 687, found that "compensation is payable for 'any direct loss, damage . . . or injury' that resulted from Iraq's invasion and occupation of Kuwait" (emphasis added).¹²² The panel also relied on the more detailed provisions of Governing Council Decision 7, which do not define minimum quantitative measures for compensable damage.¹²³ This approach is consistent with that of other international law authorities, as stated by the International Law Commission.

The International Law Commission's exhaustive investigation of state responsibility provides guidance as to what is required by international law.¹²⁴ Using the example of harm caused by fishing during a fishery's closed season, the International Law Commission observes that "injury" is defined in a broad and inclusive way, leaving it to the substantive rules of international law to specify what is required in each case.¹²⁵ Basing its position on Security Council Resolution 687, which does not set a threshold of materiality for damage, the environmental panel rejected Iraq's argument.¹²⁶ The key issue for the panel was not whether the damage reached a particular threshold, but whether it was a direct result of Iraq's illegal acts and whether the proposed methods and costs of remediation were reasonable. The panel found that the location, nature, and extent of the damage were relevant to determining whether the remediation was reasonable; it also identified actual or potential effects on the environment as factors that must be considered:

Thus, for example, where damage that might otherwise be characterized as "insignificant" is caused to an area of special ecological sensitivity, or where the damage, in conjunction with other factors, poses a risk of further or more serious environmental harm, it may not be unreasonable to take remediation measures in order to prevent or minimize potential additional damage.¹²⁷

The environmental panel's acknowledgment of the possibility of areas of special ecological sensitivity was an important interpretation of the standard for the threshold admissibility of environmental claims.¹²⁸ This view of environmental damage brings scientific insight to bear on the doctrine of state responsibility for environmental losses.

¹²¹ UNCC (2005), para. 23; UNSC (1991h).

¹²² UNCC (2005), para. 24; UNSC (1991h), para. 16.

¹²³ UNCC (2005), paras. 25–28; UNCC GC (1992a); UNCC (2003). See also UNCC (2005), paras. 53–54.

¹²⁴ ILC (2001).

¹²⁵ ILC (2001), 92, comment 8.

¹²⁶ UNSC (1991h).

¹²⁷ UNCC (2003), para. 36.

¹²⁸ Allen (2011).

Compensability of the costs of environmental solidarity

Can a country be compensated when it acts as a Good Samaritan and sends equipment to respond to an oil spill, or sends scientists to assess damage? Were the costs incurred by countries outside the war zone that responded to the call to protect the environment sufficiently “direct” that Iraq should have been obliged to pay for them?¹²⁹ The international community provided material help in addressing immense practical problems confronting the affected countries.¹³⁰

- Kuwait faced two priority concerns: to extinguish the oil well fires and to remove landmines and unexploded ordnance.¹³¹
- For months, Jordan’s rangeland and groundwater were taxed by hundreds of thousands of refugees who had fled from the conflict zones with their livestock.¹³²
- Saudi Arabia was under continuing threat from a massive oil spill that not only contaminated over 600 kilometers of its eastern coastline and harmed marine wildlife, but also threatened seawater intakes for the desalination plants that supplied nearly half the potable water in Saudi Arabia and nearly all the water for Riyadh, the capital.¹³³

During the oil spills, national governments, acting directly and through international organizations, mobilized a response. An international scientific collaboration, organized by the Intergovernmental Oceanographic Commission of UNESCO (the United Nations Educational, Scientific and Cultural Organization),

¹²⁹ Nongovernmental organizations—including Green Cross International, the International Union for Conservation of Nature, and the World Wildlife Fund—also contributed to the response effort.

¹³⁰ Popkin (1991).

¹³¹ “The unprecedented catastrophe of hundreds of burning and gushing oil wells and the consequent pollution of the environment overshadow the damage sustained by the rest of the industry. In monetary terms the current situation represents a daily loss to Kuwait of between [US]\$40 million and as much as [US]\$120 million. . . .

At the time of the mission’s departure from Kuwait and six weeks after the start of the oil fires, no one was in a position to define with certainty the composition of the fire emissions. No one can be complacent over the hundreds of oil wells that continue to scar the countryside, emitting dense black clouds of smoke that hover ominously over Kuwait—clouds that frequently blot out the sun, turning day into night and causing abnormally sharp drops in temperature. This would point to a serious gap in response mechanisms. It has precluded the mission from saying very much about the resulting effect on human health and on ecosystems. . . .

Certainly, the most lasting environmental problem facing Kuwait will be that of mines and other unexploded ordnance. It will hit at the social behavioural patterns of all residents of Kuwait as well as the nomadic people who seasonally move across Kuwait’s borders” (UNSC 1991d, paras. 535, 536, and 538).

¹³² UNCC (2005).

¹³³ Schmitt (1991); Apple (1991); UNCC (2002, 2003). Iraq’s own desalination plants were also threatened by the oil that it had released into the Gulf.

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cruised the Gulf aboard the *Mt. Mitchell*, a U.S. research vessel, tracking the oil spills and assessing their impact on the marine environment.¹³⁴ Other international organizations that assisted included the International Maritime Organization, which established the Persian Gulf Oil Pollution Disaster Fund;¹³⁵ the World Meteorological Organization, which undertook studies of the effects of the oil fires; UNEP, which became involved early in the war and continued to provide environmental assessments afterward; the United Nations Development Programme; and the Regional Organization for the Protection of the Marine Environment.¹³⁶

In February 1991, UNEP's executive director convened an interagency consultation whose short-term objectives were to assess the condition of the environment and provide a draft environmental rehabilitation plan.¹³⁷ The group's long-term objective was "to assist the Governments of the KAP [Kuwait Action Plan] region in the rehabilitation and sound management of the marine, coastal and related environments of the region, through the provision of technical expertise."¹³⁸ UNEP eventually established a special trust fund to finance assessment and mitigation of environmental impacts in Iraq, Kuwait, and Saudi Arabia.

The environmental panel decided that claims for these response costs were compensable in principle.¹³⁹ The panel reasoned that neither Security Council Resolution 687 nor Governing Council Decision 7 prohibited countries outside the conflict zone from being compensated for losses or expenses incurred in relation to environmental damage in the Gulf.¹⁴⁰ And, as many of the activities for which compensation was claimed had been undertaken in response to appeals from the UN General Assembly, other UN bodies, and the Gulf countries, there was all the more reason to award compensation. By legitimizing the costs of assistance, the panel's decision reinforced the norm that the international community has a role in assisting with environmental emergencies—even if ultimate responsibility for damage rests with the country that caused the damage.¹⁴¹

Of the US\$43.3 million claimed for response costs by governments outside the conflict zone, the UNCC awarded approximately US\$8.4 million.¹⁴² Where no award was made, the most common reasons were that the claimant had provided insufficient evidence of expenses or had failed to show that the claimed activities were directly related to monitoring, assessment, or response.

¹³⁴ UNCC (2002).

¹³⁵ UNCC (2002).

¹³⁶ UNCC (2002).

¹³⁷ UNEP (1993).

¹³⁸ UNEP (1991b), 5.

¹³⁹ UNCC (2002); see also UNCC (2001).

¹⁴⁰ UNSC (1991h); UNCC GC (1992a).

¹⁴¹ Sand (2005).

¹⁴² UNCC (2002).

Oversight of awards

Historically, governments have been able to use compensation payments as they saw fit. But in 2001, in a break with traditional reparations practice, the UNCC established a tracking program for the first group of awards—those that were intended to fund studies to monitor and assess environmental damage.¹⁴³ In addition, for the first installment of F4 claims, the Governing Council put in place measures “to ensure that funds are spent on conducting the environmental monitoring and assessment activities in a transparent and appropriate manner and that the funded projects remain reasonable monitoring and assessment activities.”¹⁴⁴ Although the UNCC oversight and audit programs were innovations in compensation practice, they were in keeping with UNCC procedures for previous claim categories, in which the Governing Council had required successful claimants to report that the funds received had been transferred to the real claimant in interest—that is, the individual or corporation that had submitted a claim for its loss through its government.¹⁴⁵ In the case of humanitarian claims, for instance, the real claimant in interest was the individual claimant.¹⁴⁶

Claimant governments submitted regular progress reports on their implementation of the environmental studies—and, once the projects were completed, the governments submitted audited financial statements.¹⁴⁷ The requirements for progress reports and audits were designed to ensure that the environmental claimants used the award funds only for the monitoring and assessment studies that they had asserted were needed. In 2005, as the environmental panel concluded its work, it recommended that claimants return the remaining funds awarded for four projects that were, in its judgment, no longer necessary.¹⁴⁸

For all subsequent awards for projects proposed for the future, the Governing Council required claimant governments to provide similar technical and financial progress reports. In December 2005, at the end of the claims review, the Governing Council—taking into consideration a request from Iraq and the positive response of claimant governments to previous monitoring requirements—established the Follow-up Programme for Environmental Awards (Follow-up Programme), which provided detailed guidelines for ongoing technical and financial review of the largest remediation projects.¹⁴⁹ The Follow-up Programme established continuing obligations for the claimants to (1) use the award funds transparently

¹⁴³ Payne (2011c).

¹⁴⁴ UNCC GC (2001b), para. 6.

¹⁴⁵ UNCC GC (1994a). While international courts and tribunals have traditionally recognized only states as parties, states could espouse the claims of individuals as a matter of diplomatic protection; the advent of mixed arbitral tribunals allowed the resolution of disputes between individuals and states, and between nationals of different states (de Auer 1927).

¹⁴⁶ Crook (1995).

¹⁴⁷ Kazazi (2002).

¹⁴⁸ UNCC (2005).

¹⁴⁹ UNCC GC (2005a).

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and appropriately, and (2) to ensure that the projects continued as reasonable remediation, monitoring, and assessment activities.¹⁵⁰

The Follow-up Programme provided for third-party oversight and was designed with sufficiently flexibility to permit adaptation when the UNCC shut down operations. In November 2013, the Governing Council declared the program closed, and its mandate fulfilled.¹⁵¹

The purpose of the Follow-up Programme was to protect international and regional community interests in restoration of the environment while balancing claimants' sovereignty interests. The program was made possible by the fact that both the former parties to the conflict and the members of the Security Council were willing to conduct oversight cooperatively. This willingness may have stemmed from several sources: Iraq may have been interested in acquiring expert knowledge about remediation and in ensuring that award funds were not diverted to less communitarian ends, and the directors of the claimants' national environmental agencies may have wished to control the substantial budgets generated by the awards. The overall willingness to establish the Follow-up Programme is indicative of a trend in which states define their self-interest in terms of environmental quality.

Regional cooperation program

Another outcome of the UNCC environmental program was increased regional cooperation, which came about through the creation of the Regional Environmental Rehabilitation Advisory Group (RERAG), an entity that was established by Iraq and several claimant governments. The first meeting of the RERAG, which took place in Kuwait, in September 2005, under the aegis of the UNCC, included the governments of Iraq, Jordan, Kuwait, and Saudi Arabia.¹⁵²

The RERAG's initial purposes were to support the establishment of the Follow-up Programme and to explore the possibility of creating a regional database of environmental information. The wealth of data produced by the studies funded by UNCC awards made the database a particularly attractive project—one that had been proposed much earlier by Jordan and other nations.¹⁵³

¹⁵⁰ UNCC GC (2005a).

¹⁵¹ UNCC (2013).

¹⁵² Various regional and international environmental organizations are also active in the Gulf, among them the Regional Organization for the Protection of the Marine Environment (ROPME), which is the secretariat of UNEP's Regional Seas Convention for the Gulf. ROPME, which focuses on coordinating common action to protect the Gulf, includes Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. UNEP has maintained an office in the region, and the World Bank opened an office in Kuwait in 2008.

¹⁵³ In July 1991, Jordan proposed to the UN General Assembly the creation of a "United Nations Environmental Data Base" as a "confidence-building measure and another step towards the international protection of the environment" (UNGA 1991, para. 4).

As of this writing, the RERAG continued to meet but had not moved forward with the database project.¹⁵⁴ Scientists assessing the current state of the Gulf have urged “stronger environmental considerations, greater interaction among projects, increased information sharing between government departments, a longer-term viewpoint and . . . Gulf-wide strategic approaches” in order to ensure the Gulf’s ecological and economic sustainability.¹⁵⁵

The RERAG’s formation was organic, and was in no way part of the UNCC’s initial mandate. Although the UNCC’s limited mandate prevented it from providing an institutional home for the RERAG, the UNCC’s rather flexible structure enabled it to foster the regional organization. The RERAG’s independence from the UNCC was likely for the best, as the regional partners became responsible for the success or failure of the group.

ASSESSMENT OF THE UNCC

The UNCC put many of the international-affairs trends of the past several decades into practice by emphasizing a multilateral solution, relying on international institutions, adapting mass claims processes from domestic law, employing computer technology, and using the compensation process to build capacity among participants.

The reparations process, the restoration of natural resources, and the transition to peace

The UNCC was only one element of the international response to Iraq’s invasion of its neighboring state; any assertion that the environmental claims process played a central role in the overall effort to achieve peace in the region—or in Iraq—would be disproportionate. Global oil markets, geopolitics, and religious and ethnic tensions are among the determinants of an outcome that is not yet clear. Nonetheless, the UNCC environmental program can be assessed on its own terms, and its contribution to peacebuilding evaluated in terms of what might be reproduced elsewhere. Moreover, the UNCC did help to improve environmental conditions and to increase environmental cooperation in the Gulf.

The evolving view of peacebuilding is sometimes described as “state building.”¹⁵⁶ Restoring the legal order is one aspect of state building; restoring economic stability is another. In the words of the UNCC’s first executive secretary, “the Security Council sought to restore a legal order that had been broken and to make good the damage caused by the conflict.”¹⁵⁷ With regard to economic stability and predictability, Laurence Boisson de Chazournes has noted that by

¹⁵⁴ BRP (n.d.a); see also BRP (n.d.b).

¹⁵⁵ Sheppard et al. (2010).

¹⁵⁶ Noble (2006); Kleffner (2008); Payne (2014).

¹⁵⁷ Alzamora (1995), 3.

choosing to fix the percentage of Iraq's contribution to the UNCC, the Security Council protected Iraq's economy from excessive depletion of financial resources by the exaction of compensation.¹⁵⁸ International reparations of this type are pragmatic, outward facing, and focused on reestablishing the belligerent's relations with other states.

As Sand and others point out, the UNCC moved beyond the bilateral, state-to-state approach that had traditionally dominated war reparations. Particularly with regard to the environment, the UNCC's decisions acknowledged obligations between Iraq and the community of nations.¹⁵⁹ International emergency response activities were compensated, which can be expected to provide an incentive for future international response efforts.¹⁶⁰ Finally, Iraq's relations with the rest of the world did begin to normalize in the mid-1990s, in parallel with the progressive resolution of individual, corporate, and government claims from ninety-six countries.

In terms of the speed and efficiency of processing claims, the UNCC environmental program was clearly a success. The docket of 168 environmental claims, seeking approximately US\$85 billion, was reviewed in five and a half years, and approximately US\$5.3 billion was awarded. In contrast, the Iran-United States Claims Tribunal, which was formed in 1981, following the 1979 Iranian revolution, has awarded approximately US\$2 billion, and review is still not complete. Similarly, the U.S. domestic litigation over the *Exxon Valdez* oil spill took twenty years.

With respect to increasing knowledge about the environment, the UNCC environmental program can show measurable success. Both data reported through the tracking program and evidence submitted in support of claims made clear that most of the US\$243 million awarded for monitoring and assessment was spent immediately on the evaluation of environmental damage.¹⁶¹ A review study of the state of the Gulf refers approvingly to the amount of data accumulated (and continuing to be produced) through the UNCC awards, but it also notes that "much information is confined to consultancy and government reports which,

¹⁵⁸ Boisson de Chazournes (1998).

¹⁵⁹ Sand (2005). For a related view, see David D. Caron's suggestion that government claimants acted as agents for the environment, which opens the possibility that a claim could be made by a state or an international organization on behalf of a common resource, such as the high seas (Caron 2004, 2011). Shinya Murase has observed that "global environmental risks should nevertheless entail certain international responsibility arising from the breach of obligations *erga omnes* [owed to all]" (Murase 1991, 410).

¹⁶⁰ UNCC (2002); Sand (2005).

¹⁶¹ UNCC (2003), para. 84. For example, on the basis of information obtained from monitoring and assessment projects, Kuwait reduced the amount claimed for remediation of terrestrial damage, and "Saudi Arabia submitted shoreline survey data [indicating] that there are large areas where oil contamination continues to impair coastal resources and where there has been little or no biological recovery" (UNCC 2003, para. 177).

for reasons for perceived sensitivity and confidentiality, may never be published nor enter the public domain.”¹⁶²

It is fair to say that for some countries in the Gulf region, the environmental claims program built human capital and increased knowledge. Although some claimant countries that lacked trained personnel hired international consulting firms to provide expertise in environmental assessment and remediation, the claimants developed expertise by having their nationals work with the consultants. The influx of substantial funds to environmental agencies likely raised the status of such agencies.

Despite these successes, the long delay in addressing the environmental damage is a matter of concern. The public health effects of pollutants from the oil well fires were a serious issue in Kuwait and Saudi Arabia. The long-term effects of sandstorms from disturbed desert surfaces, toxic materials from military ordnance and oil, and other threats to human health argue for addressing environmental damage soon after a conflict. The large remediation and restoration projects began only many years after the damage had occurred.¹⁶³

It is not possible to assess the damage that could have been avoided if environmental restoration had been a priority. In fact, because of the delay in remediation, a certain amount of natural recovery occurred, which at least had the virtue of reducing the overall cost to Iraq. But if restoration programs had begun in 1992, would Jordan’s rangelands be healthy habitats by now? Would Kuwait’s Raudhatain aquifer have been less vulnerable to pollution from oil and seawater? And would the salt marshes of the Saudi Arabian coast be functioning as nurseries for marine life?

Even though the reports are not detailed enough to tell the whole story,¹⁶⁴ and some environmental damage was not claimed, the environmental panel reports provide a catalogue of damage that indicates the high environmental cost of war.¹⁶⁵ Clearly, the total environmental cost of the 1990–1991 war was greater than the US\$5.3 billion awarded.

As with all compensation processes, the scope of damage that was addressed was restricted by the claims that were brought. As noted earlier, reports of environmental impacts in other parts of the Gulf suggest that other, viable claims could probably have been made. Some claimants may have chosen not to seek redress, and others may have been unaware of the types of claims that could be made. Future institutions would be wise to provide clear guidance to injured

¹⁶² Sheppard et al. (2010). See also Payne (2011b), which describes UN confidentiality rules.

¹⁶³ UNCC (2003, 2004a, 2004b, 2005). In 2009, the *Jordan Times* reported that UNCC-funded restoration projects were scheduled to begin, upon approval from the UNCC (Namrouqa 2009).

¹⁶⁴ Under the UNCC rules, the reports were limited in length, and were required only to “briefly explain the reasons for the recommendations” (UNCC GC 1992b, art. 38[e]).

¹⁶⁵ UNEP and Woodrow Wilson International Center for Scholars (2004).

states on the scope of environmental damage that will be considered compensable under international law, using the UNCC decisions as a reference.

Events have hampered the evaluation of the effect of the UNCC environmental program on post-conflict reconstruction within Iraq. Until 2003, Saddam Hussein's government imposed restrictions on information sharing, scientific collaboration, and assessment; subsequently, the 2003 U.S. invasion of Iraq and its aftermath overshadowed the environmental damage of the earlier war, and once again limited access to information about the status of the damage and personnel who might be involved in remediation.¹⁶⁶ There is hope, however, that the RERAG will prove to be a valuable resource for Iraq, as well as an opportunity to share information about the restoration of its war-damaged environment with those countries whose environment it damaged and has now paid to restore.

Criticisms of the compensation program have been directed toward the UNCC as a whole, rather than at the environmental program in particular. The chief argument has been that the people of Iraq were in dire need of food, shelter, and health care at a time when between 5 and 30 percent of Iraq's oil revenues were allocated to fund the reparations program. Unfortunately, Saddam Hussein and the Oil-for-Food Programme proved untrustworthy guardians of resources directed to Iraq.¹⁶⁷

Hans C. von Sponeck, former UN humanitarian coordinator for Iraq, has acknowledged that compensation was appropriate but recommended that "smart compensation" be used in the future:¹⁶⁸ in von Sponeck's view, a lump sum should have been provided for humanitarian claims, but other compensation should have been deferred, in order to take into account Iraq's long-term potential for wealth from its oil resources,¹⁶⁹ the short-term needs of the very poor foreign workforce that made up the majority of UNCC claimants, and Iraq's own humanitarian needs. Indeed, of the US\$45.5 billion that Iraq has paid to successful claimants to date, approximately US\$3 billion went to small individual claims and another US\$8.5 billion to larger individual claims.¹⁷⁰ Among the individual claims were nearly 1 million from people who had been forced to leave Iraq or Kuwait; nearly 6,000 from people who had suffered serious personal injuries or the death of a spouse, child, or parent; and 1.7 million from people who had

¹⁶⁶ UNEP (2003). The authors of the 2003 UNEP desk study of Iraq's environment comment on the impossibility of working in the field or contacting Iraqi scientists.

¹⁶⁷ Independent Inquiry Committee into the United Nations Oil-for-Food Programme (2005).

¹⁶⁸ von Sponeck (2006).

¹⁶⁹ Despite the vicissitudes of repeated conflicts and sabotage, Iraq's oil resources are among richest in the world (Williams 2009). As of 2013, production was approximately 3 million barrels per day, worth US\$94 billion per year to Iraq (Mackey 2013). Iraq is also developing its southern oil fields, which had not been fully exploited—initially because of the war with Iran, and later because of failing infrastructure and mismanagement (Williams 2009).

¹⁷⁰ UNCC (2014b); Van Houtte, Das, and Delmartino (2006); Boisson de Chazournes (1998).

suffered personal losses of up to US\$100,000.¹⁷¹ While von Sponeck's proposal has merit, the impact of the public health and environmental damage catalogued in the F4 reports suggests that smart compensation should also give high priority to restoring ecological function and removing contaminants.¹⁷²

Finally, despite the tumultuous political circumstances, RERAG meetings conducted under the auspices of the UNCC facilitated contact between Iraq and its neighbors. The initial meetings focused on environmental cooperation and on the rehabilitation of all countries in the region.¹⁷³ By mutual agreement, representatives of the governments of Iraq, Jordan, Kuwait, and Saudi Arabia continued to meet to discuss the progress of the remediation projects—discussions for the benefit of Iraq as well—and to plan for the development of a regional database of environmental information.

Lessons for the future

More than one observer has concluded that the UNCC emerged from the confluence of circumstances that are not likely to recur often—namely, the millions of humanitarian claims; the political will shown by the Security Council in the face of Iraq's breach of international peace and security;¹⁷⁴ a post-Cold War willingness to cooperate; and the financial resources generated by Iraq's oil wealth.

It nevertheless seems likely that the UN will be asked to form compensation bodies in the future. To impel reluctant parties to participate, the UN offers both the assurance of third-party neutrality and the threat of collective action. As for Iraq, Erika de Wet believes that “the absence of such a mechanism would have aggravated the tense situation in the region.”¹⁷⁵ This is a potentially powerful justification for future claims commissions.

The UNCC marked the first time that the Security Council had exercised its chapter VII authority to establish a claims commission.¹⁷⁶ In the past, hostile states have managed to conclude bilateral agreements on compensation mechanisms (for example, the Iran–United States Claims Tribunal), but Saddam Hussein and the Iraqi parliament would have been unlikely to agree to such measures.¹⁷⁷

¹⁷¹ The more than 1.7 million claims in category C included 915,527 Egyptian nationals with approximately 1,240,000 claims for wages held by the Iraqi government and 31,868 individual claims from Bedouins for a fixed amount of US\$2,500 each, submitted by the government of Kuwait in accordance with the special program established by the Governing Council in July 2004 (UNCC GC 2004a). (Bedouins—not to be confused with Bedouins—are a heterogeneous group of people who were born in or live in Kuwait but are not formally recognized as Kuwaiti citizens [Hamad 1991]).

¹⁷² See, for example, Caron (2011).

¹⁷³ UNCC GC (2005a, 2005b).

¹⁷⁴ Boisson de Chazournes (1998).

¹⁷⁵ de Wet (2004).

¹⁷⁶ de Wet (2004).

¹⁷⁷ de Wet (2004); Kirgis (1995).

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In Resolution 687, when the Security Council referred to “environmental damage and depletion of natural resources” in its definition of Iraq’s liability, it was the first time that the environment had been listed explicitly as a subject of war reparations.¹⁷⁸ Traditionally, the doctrine of state responsibility has recognized obligations between two states, rather than between a state and the international community—but this view is changing.¹⁷⁹ The UNCC has furthered this evolution in the direction of “legal accountability of all states involved for the safeguarding of common concerns to protect and conserve the Earth’s natural heritage, irrespective of its territorial location.”¹⁸⁰ This is a significant contribution to the progressive development of international law.¹⁸¹

Environmental compensation at the scale of the UNCC awards requires that the responsible state be able to pay, but there are ways to manage a smaller compensation fund.¹⁸² One option, if compensation resources are limited, is to assign priority to particular claims categories on the basis of various principles or practical criteria. Limited resources can also be distributed on a pro rata basis, in which every successful claim is paid at a percentage of its awarded value, but such an approach may undermine the goals of the program. Although international law considers a symbolic payment to be acceptable as satisfaction of a state’s obligation to another state, if the purpose of the award is to recover the community interest in a damaged environment, an award that is insufficient to achieve environmental restoration would not satisfy the purpose. Another option, non-financial reparations, in which the responsible party undertakes restoration activities, would be particularly appropriate because it would avoid the challenge of monetizing environmental losses and would facilitate restoration approaches that could be less costly and more effective.

Recognizing the likelihood that limited resources will be spent first on humanitarian, corporate, and government claims, another alternative is to create an international fund for environmental protection, rapid response, and restoration of the environment and natural resources damaged by armed conflict. The fund could target areas of special environmental importance, such as cultural heritage sites designated by the World Heritage Convention and wetlands of international

¹⁷⁸ UNSC (1991h), para. 16.

¹⁷⁹ ILC (2001). As John Crook has observed, “For the first time, a multilateral UN mechanism has been created to provide redress for the individual consequences of illegal state action” (Crook 1995, 77).

¹⁸⁰ Sand (2005), n107. For disparate views on the obligation to compensate environmental damage, see Sands, Mackenzie, and Khalastchi (1998); Low and Hodgkinson (1995); Plant (1992); and Leibler (1992).

¹⁸¹ Elias (2004); Boisson de Chazournes (1998); Sand (2005).

¹⁸² The UNCC did not know, initially, whether the resources available to the Compensation Fund would be sufficient for all the successful claims. The Governing Council decided to expedite the humanitarian claims, in part to ensure that they would be paid before funds ran out (Feighery 2003). Other reparations programs have had to do their work with limited funds. For information on reparations programs with more limited funds, see de Greiff (2006).

significance covered by the Ramsar Convention.¹⁸³ The impacts of climate change suggest additional criteria for assigning priorities: habitats and natural environmental infrastructure that are particularly valuable as carbon sinks, refugia for biodiversity, or providers of other key ecosystem services. States that harm the environment could be required to pay into the fund once they had recovered from the effects of the conflict. Such an approach would help relieve the tensions between the desire to meet humanitarian needs and the need for swift action on behalf of the environment.

CONCLUSION

The aftermath of the Iraqi invasion of Kuwait points to several measures that can be used to advance peacebuilding, environmental integrity, and respect for international law. The more than US\$5 billion in environmental damage that was verified and valued by the UNCC is a strong argument for preventive measures. This point is strengthened by the severity of the damage to coastal and desert areas, where recovery will be long, slow, and incomplete. Preventive measures should include more stringent legal prohibitions on attacks on the environment and natural resources, stronger social values emphasizing stewardship, and more effective prevention and response mechanisms.¹⁸⁴

To ensure that post-conflict environmental assessment and remediation occurs, consistent use should be made of international compensation institutions. An international standing fund—which would be replenished by levies on the belligerents—should be established to finance timely response and cleanup. In the wake of the Iraqi invasion of Kuwait, the contributions of UNEP and other national and international scientific organizations to response, assessment, and recovery were considerable, and provide an example of effective intervention.

Such an international fund and compensation regime should demand transparency from all participants, with respect to both proceedings and any research produced as a result of the program's work. The extensive research on public health, and on marine and terrestrial ecosystems that was carried out in the Gulf as a result of the UNCC program has, for the most part, not been published.¹⁸⁵ Governments are cautious about sharing environmental data that they perceive to have military or economic value, or that may evoke public anxiety—and in some cases, the concern is legitimate. In most cases, however, such concerns should be trumped by the objective of increasing scientific knowledge and cooperation between governments, in order to better care for the shared environment.

Environmental restoration is long-term, while the emphasis in peacebuilding is, for good reasons, on the short to medium term. Moreover, the recovery of

¹⁸³ See, for example, Caron (2000).

¹⁸⁴ For concurrence with some of these points, see UNEP (2009).

¹⁸⁵ Sheppard et al. (2010).

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complex ecological systems may have no apparent relation to the human livelihoods and basic needs that are the focus of post-conflict law, and may thus be neglected. Early attention to the human population is appropriate as a step in the recovery of traumatized nations, but long-term planning to mend the environment must be part of the basic peacebuilding model.

Where prevention fails, a breach of the international duty to refrain from aggressive war has consequences. By declaring Iraq liable for the environmental damage caused by its invasion and occupation of Kuwait, Security Council Resolution 687 recognized environmental harm as a compensable loss for the first time in international law.¹⁸⁶ The UNCC's tracking and reporting requirements further required that the funded remediation, monitoring, and assessment projects remained reasonable and environmentally sound activities. Together, these devices establish legal accountability for protection of the common natural heritage. The principles and procedures developed through the UNCC process provide a model for future legal approaches to restoring the post-conflict landscape.

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¹⁸⁶ UNSC (1991h).

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