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#### Low wages and labor law exemptions are key for pandemic and national disaster response, the AFF makes this impossible – even the NAACP isn’t supporting strike tactics and advocates for “gentle advice”

Kutz 21 (Jessica Kutz – Assistant Editor for High Country News who is interviewing Carlee Purdum who researches incarcerated labor conditions and trends, “The essential — and dangerous — work prisoners do: Incarcerated people respond to pandemics, wildfires, avian flu outbreaks, mudslides and more”, https://www.hcn.org/articles/south-labor-the-essential-and-dangerous-work-prisoners-do, 23 April 2021, EmmieeM)

Last year, when the COVID-19 pandemic swept through nursing homes, exhausted medical supplies and sent the country into lockdown, prison officials gave incarcerated people their marching orders: Manufacture hand sanitizer, sew face masks, transport dead bodies, dig graves.

The workers toiled in crowded factories, overflowing morgues and inside their own prisons, where they often lacked access to essentials like soap and adequate medical care. In the process, they became one of the most vulnerable — and yet essential — parts of the nation’s emergency response.

Seven Western states — Montana, Washington, Idaho, Oregon, Nevada, California and Arizona — specify incarcerated labor as a resource in their state emergency operation plans. Others, like Colorado, passed legislation in 1998 like the Inmate Disaster Relief Program, which allowed the state to use the workforce for wildfires and other emergencies. (Recently, Colorado passed a new law by the same name that requires the state’s fire division to encourage formerly incarcerated firefighters to apply for paid work in the field.) The reason is simple: “(Incarcerated workers) are extremely low-cost,” said Carlee Purdum, an assistant research professor with the Hazard Reduction and Recovery Center at Texas A&M University. According to the Prison Policy Initiative, such workers received anywhere from 14 cents to $1.41 an hour on average in 2017. And because they are technically considered a state resource, said Purdum, the Federal Emergency Management Agency, or FEMA, further subsidizes the cost of their labor when states are overwhelmed by natural disasters.

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The workers can be tapped for nearly anything. “I’ve seen and documented the use of incarcerated workers for a lot of different types of hazardous work, from cleaning up oil spills to going through and eliminating infected birds with the avian flu,” said Purdum. “Really, anything that happens in a disaster, if it overwhelms the community, and (state or local officials) feel like they have a need, they will turn to incarcerated workers.”

But incarcerated people aren’t just vulnerable owing to the hazardous nature of the work they do; they lack the power to keep themselves safe and are forced to rely on prison officials for their well-being in dangerous situations. High Country News spoke with Purdum, who has spent her career researching the unique problems faced by incarcerated people during disasters, along with lesser-known aspects of prisoners’ labor. This interview has been edited for length and clarity.

High Country News: Much of your work focuses on the vulnerability of incarcerated people when a disaster hits. What are some of the less obvious ways prison populations are impacted by an extreme weather event or natural disaster?

Carlee Purdum: The location of prisons contributes to that vulnerability because there is a priority for cheap land, and that is often in rural areas. When prisons are impacted, it’s difficult to get resources to them. And then the characteristics of a prison itself create a lot of vulnerability: Incarcerated persons have to rely on the state and the staff at their individual unit to protect them, and that is often a very challenging thing. There are also the characteristics of incarcerated persons themselves. They are a stigmatized population, so they’re often on the lowest priority in terms of disaster resources.

Incarcerated persons have very limited rights, so if they are told that they are going to go out and do a certain type of work, they don't have the right to refuse. If they do refuse, they can be written up with disciplinary infractions, they can be put in solitary confinement; it can have real-world impacts on them and their chances of being released. One man, Neil Ambrose, was doing debris cleanup, and there was a downed power line after a storm. The power line sparked a small fire, and the guard ordered the incarcerated persons to stomp the fire out — and when Neil did that, he was electrocuted and died.

Even if they perceive that their health and their safety and even their lives are at risk, they don’t have a right to say, “No, we’re not going to participate in that.”

HCN: In your research, you analyzed state emergency operation plans. How are prison populations addressed in state disaster planning?

CP: I found that incarcerated persons are viewed as a vulnerable population, a hazardous population and as a workforce. States will include some references as to how incarcerated persons need to be protected in disasters. And evacuations of prisons do happen. One example is wildfire in Western states when institutions are threatened.

But, on the other hand, they are also viewed as a hazardous population. (And) in emergency planning, there’s a disproportionate focus on emergencies that are defined as “inmate-precipitated”— which includes hostage situations, riots, things like that. Those are more frequently included in not only in planning documents but also in emergency management within prisons.

There’s this focus on incarcerated persons perceived as being a threat, but less focus on the kinds of emergencies and disasters where incarcerated people are the survivors and need a humanitarian response. That’s been recognized as a problem in prison emergency management for the last two decades.

HCN: What are some lesser-known uses of incarcerated labor in the West that the general public might not think about?

CP:  For any major disaster that happens, there’s typically going to be some kind of role for incarcerated workers, and that's because disaster programs subsidize it.

There is a really compelling example in California, where incarcerated workers were helping with mudslides back in 2005. They pulled out more than 150 incarcerated folks from the prisons to help dig out this debris that had impacted this community. They were working alongside the cadaver dogs and other workers with specialized equipment. They were looking for possible survivors or possible deceased victims. In Nevada, incarcerated persons have been active in flooding events. On the website of (Nevada’s) Department of Corrections, they also say that their work crews were involved with recovery efforts for the space shuttle Columbia disaster.

The impact of hazards and disasters on incarcerated persons is extremely traumatic, and we just have no idea what the true toll is on people, on their health, on their relationships with their families, on their life trajectories.

It’s throughout the lifecycle of disasters, too. You may not think of construction workers at the prison as being involved in disaster work, but if they’re repairing a damaged state facility, if they’re providing some kind of construction work on a damaged school — that is recovery work. In California, they’re helping to do the seismic retrofitting of buildings. That’s hazard mitigation work. They’re really involved throughout the entire lifecycle, and in disasters, that’s mitigation, preparedness, response and recovery.

HCN: Can you talk more about the people themselves and what is at stake for them?

CP: When you look at the public health impact, or even just the emotional trauma and physical harm, there are many examples of incarcerated people suffering in the context of disasters. Whenever (they) are evacuated from a facility, that can be very traumatic for family members who may have no idea where their child is, or where their husband or wife is. When evacuations happen, (prison officials) often keep that information private until the evacuation is really complete.

Then we have these very infamous examples of the trauma that incarcerated people at the Orleans Parish prison suffered after Hurricane Katrina. They were stuck in their cells with chest-high water that was contaminated. These are people having medical emergencies. They had no access to fresh water or food, and then when some people tried to escape this very dangerous situation, they’re viewed as this threat.

The impact of hazards and disasters on incarcerated persons is extremely traumatic, and we just have no idea what the true toll is on people, on their health, on their relationships with their families, on their life trajectories. It’s an unexplored subject. There needs to be further research on how being incarcerated can impact a person’s life if they’re exposed to disasters.

HCN: What are you hoping people will take away from this research?

CP: I have talked to other organizations that are trying to put together materials for communities to be able to hold their local prisons responsible for how they interact with incarcerated persons in disasters. The environmental justice program with the NAACP put together a resource for communities after disasters to make recovery more equitable. It serves as a checklist: First, look in your community and see if incarcerated persons are being used for disaster work. And if they are, ask if that work is voluntary; ask what kind of training is being used; ask what kind of equipment like personal protective equipment incarcerated persons are being given.

I recommend people look into tools like that, look into resources like that, to make the practice more visible and to hold those agencies accountable for how they are treating people.

#### Lack of quick oil spill response (OSR) is an existential threat – innovative clean-up tech has slowed and barriers prevent alternate prevention measures or different actors solving, citing meta analysis of studies and spills from 67’ to now

Little et al 21 (David I. Little (Environmental Consultancy @ Cambridgeshire), Stephen R.J. Sheppard (Collaboration for Advanced Landscape Planning & Department of Forest Resource Management @ Faculty of Foresty @ University of British Columbia), David Hulme (Global Development Institute @ University of Manchester), “A perspective on oil spills: What we should have learned about global warming”, https://www.sciencedirect.com/science/article/pii/S0964569120304166, Ocean & Coastal Management, Volume 202, 1 March 2021, EmmieeM)

Scientific knowledge of marine pollution and oil spill response (OSR) innovation has diffused over half a century. Local community resilience to spills and the equitable application of knowledge worldwide are constrained by several barriers. These range from access, governance, cost minimisation, through austerity and poverty in affected areas, to realpolitik (e.g. vested interests, nationalism, corruption, security breakdown and war). Ongoing incidents show inequalities in spill risk and OSR capability. Advances in knowledge have belatedly brought us to the conclusion that the logical way to reduce adverse impacts of oil in an era of global warming is to accelerate decarbonisation. This would rapidly and simultaneously reduce the frequency, magnitude and consequences of oil spills. Meanwhile, mitigating spills, managing OSR, and restoring local communities and ecosystems at spill sites are fundamental obligations for the oil industry. These obligations should be routinely enforced by all responsible governments, and backed by inter-governmental agencies and conventions. However, we must no longer assume that even the best practices in exploration, production, refining, transport and consumption of hydrocarbons can adequately reduce their leading role in the ongoing destruction of the global environment.

1. Introduction

1.1. Background

Aged fourteen and led by an ex-wildfowler parent, two of the authors had already visited the UK's teeming seabird colonies on Handa Island, Bass Rock, Farne Islands and Skomer Island. Seeing the ‘Torrey Canyon’ oil spill on TV on March 18, 1967 was a terminal shock to childhood. Marine oil pollution suddenly became the environmental hot topic internationally for the public. The background was one of increasing concern over persistent organochlorine pesticides, highlighted in USA by Rachel Carson (1962). Cold war tensions came to a head that year in the Cuban missile crisis. Although Pacific nuclear bomb tests continued into the 1990s, a treaty banning atmospheric testing led to peak fallout in 1963, until the Chernobyl accident (1986). There was socio-political upheaval in the civil rights and peace movements, with growth in multilateral pressure groups.

Public pressure on environmental problems achieves results. Leaded petrol was phased out from 1975 in USA, from 1983 in UK (after Royal Commission on Environmental Pollution), and completed in 1999. Some countries acted on ozone layer depletion in 1978, and (after work by British Antarctic Survey), the 1987 Montreal Protocol phased-out chlorofluorocarbons (CFCs) globally. By 1979 the international dimension of acid rain from SO2 pollution made headlines leading to the United Nations Economic Commission for Europe (UNECE) Convention on Long-range Transboundary Air Pollution (the first global environmental accord). From 1990, SO2 and NOx emissions reduced in USA with the first market cap-and-trade system. Acceptance of the economic case by industry and government was essential to finding alternatives to leaded petrol and CFCs. Growing public expectations of peace, social justice and environmental protection underpinned all these changes, and oil spills inevitably ceded their position as No. 1 environmental issue.

1.2. Anthropogenic climate change

Decades later, the perceptions of ordinary people have renewed intensity. Peak concern passed to greenhouse gas (GHG) emissions causing climate change. Compared to the outrage caused by dramatic oil tanker accidents, this change in perception started slowly but grows relentlessly. The global warming hypothesis is robustly tested and accepted (except by populists and vested interests) as much as major scientific hypotheses such as the Earth's age, plate tectonics and evolution. Unlike these subjects, runaway climate change is a man-made existential crisis. It is neither academic nicety nor liberal conspiracy.

Climate change is also the eponymous crisis of the Anthropocene: over-arching, synchronous, cascading processes affecting the harsh lived experience of hundreds of millions of people with ramifications for millennia. It is the key global stressor of the planet's ecosystems, driving coastal squeeze, desertification, flooding, food security, forest fires, freak weather, human migrations, invasive species and rapid extinctions. It increases the risk of wars and viral pandemics. These stressors are intensified by positive feedback loops that are not the product of mass hysteria from social media, or a vague perception of worsening weather in news reports.

The 2008 and 2009 Conference of Parties (COP)14 and COP15 of the United Nations Framework Convention on Climate Change (UNFCCC) discussed a successor to the Kyoto Protocol that was postponed as the global financial crisis deepened. In 2015 the aim of COP21 to accelerate action and investment in a low-carbon future was enshrined in the Paris Agreement, from which President Trump would have withdrawn USA had he not lost the November 3, 2020 election. In 2019 COP25 was sabotaged by President Bolsonaro of Brazil and moved via Chile to Madrid, losing more precious time. Glasgow's COP26 is postponed until 2021 due to COVID-19.

By now we should have been well on our way to mitigating catastrophic climate change. Instead, we focused on bailing out the financial system that caused the economic crisis, and on restoring the very economy that massively discounts future impacts of climate change. A decade later we continue relying on the carbon industries, despite climate change and inequality being seen as the world's most pressing problems (Hulme, 2016). Foreign aid should encourage sustainable development, not fossil fuel projects such as $1.2 billion (B) from UK Export Finance for a Mozambique liquefied natural gas project. To avoid the calamity resulting from a mean temperature increase of 1.5 °C we have only a decade to cut CO2 emissions by 45% from a 2010 baseline (UNFCCC, 2019).

It will take ‘cold turkey’ to stop a fossil fuel addiction that provides warm or air-conditioned homes, air travel, and ever-growing numbers of cars. In a poll of 26 000 people in 26 countries under lockdown in July/August 2020, the following percentages said they would use their car more afterwards: >60% in Brazil and S. Africa; >40% in Australia, India and USA; >30% in China and Italy; and >20% in Japan, Germany and UK (Watts, 2020).

Looking at three scenarios after COVID-19 (‘good, bad and ugly’), the ‘bad’ scenario (business as usual) is identified as the most likely outcome (Hulme and Horner, 2020). With currently hollowed-out state sectors, there will be disastrous consequences if we return to the excessive consumption of business as usual, driven by poorly-regulated markets, out-of-control outsourcing, private equity, shell companies, offshore tax havens, money laundering and organised crime. Among the legal beneficiaries of the ‘bad’ scenario are opaque think-tanks, arms salesmen and the fomenters of fake news and climate change denial. What some powerful elites prefer, the rest of us as consumers apathetically seem to covet. The ‘ugly’ scenario (socio-environmental breakdown and war) would spread ever more widely. As to whether it will, our life and times are already framed by culture wars with each side seeing an enemy in plain view. In place of such populism, we must learn behaviours to manage the crises of politics, economics and environment.

Whereas a rapid shift to a low-carbon economy is extremely challenging, there is hope for a ‘good’ scenario if city and rural dwellers in developed and emerging regions are not divided and ruled by fossil fuel lobbyists, political donors and their protégés. We must ‘build back greener’ and not retreat into carbon-heavy lifestyles. An example is set by Vancouver, whose leadership in 2009 aspired to be the world's greenest city by 2020. It now leads North America in reducing carbon pollution, receiving requests for advice from 2000 cities worldwide. Standing alongside First Nations communities, Vancouver opposes bitumen export pipelines to the British Columbia coast from the Athabasca tar sands in land-locked Alberta (Mauro, 2018).

In hindsight, the 1967 ‘Torrey Canyon’ and subsequent oil spills are landmarks clearly pointing to the climate crisis becoming the ultimate emergency. The OSRs we have conducted recognize the importance of prevention (mitigation), clean-up and restoration (adaptation). Our visceral reaction to TV footage of spill impacts on seabirds in 1967 was triggered visually. Consequences of climate change can be brought home to people using landscape visualisation (Sheppard, 2005). Although CO2 is invisible, the mitigation and adaptation lessons must be applied globally, rapidly and visibly to avert climate catastrophe (Sheppard, 2012).

1.3. Research objectives

In a 2013 interview J.G. Speth articulated a serious practical dilemma: “I used to think that the top global environmental problems were biodiversity loss, ecosystem collapse, and climate change. I thought that thirty years of good science could address these problems. I was wrong. The top environmental problems are selfishness, greed and apathy, and to deal with these we need a cultural and spiritual transformation. And we scientists don't know how to do that” (quoted by Berry, 2018).

With the aim of addressing this dilemma, the following research questions were examined from the perspective of cumulative experience of oil spills:

1) What are the valuable lessons from the history of oil spills in terms of changes in public perception, responses to present and future threats and specifically to anthropogenic climate change?

2) What are the effects (on spills and climate change) of variations in public and private sector governance, ranging from moral, legal and multilateral actions to the opposite extreme of neo-colonialism and corruption among businesses and governments?

3) How can the attention of more people be stimulated to peaceful action on the urgency of global environmental protection, so that industry, governments and public cooperate on decarbonisation (i.e. GHG phase-out)?

2. Methods

With an emphasis on key oil spill incidents from 1967 to-date, the study approach was chronological but grouped into phases defined by growth in knowledge and the changing public reactions to spills. Concerns ranged from scientific to socio-economic, political and global development issues. Oil spill cases and responses were reviewed and interpreted. Climate change and oil spill perceptions were considered in cultural as well as scientific terms, illustrated by references to art, literature, music and video.

Questions for assessment of an oil spill contingency plan (OSCP) were used to invite comparison with the primary response to COVID-19. Sources included news media, technical reports, OSR handbooks and scientific articles. The lead author's knowledge since 1975 in the oil port of Milford Haven (UK) came from over 20 oil spills worldwide, spanning multiple years in four cases (‘Exxon Valdez’, ‘Sea Empress’, Gulf War, Niger Delta). Two of these assignments were as principal investigator and/or expert witness, and three as steering committee member/independent reviewer. If all spills were the same and all their OSR lessons were applied effectively and equitably, a ‘career in spills’ would have been unnecessary.

3. Results: oil spill impacts and response

3.1. The ‘new normal’ of spills

Oil has seeped into the ocean for hundreds of millions of years; thankfully, otherwise the microbial communities capable of breaking down hydrocarbons at sea would not have evolved. During WW2 fuel oil was spilled faster, in larger quantities and amid horrific loss of life. The only upside was that over-fishing was impossible in strategic waters during the conflict, and so marine fishery stocks recovered despite the oil. Oil spills affect seawater quality and ocean ecology on relatively limited temporal and spatial scales. Natural mitigating processes include: oil evaporation, spreading and dilution; water turbulence and mixing; flocculation, biodegradation, biopackaging and sedimentation of suspended oil droplets; rapid recovery or replacement as a result of plankton communities’ patch dynamics; toxin depuration physiology of fish; and wildlife mobility or avoidance behaviours.

However, in sheltered areas of coastal seas, estuaries, deltas, and particularly in fine-grained sediments and wetlands, stranded oil is often persistent and toxic. Depending on the efficacy of response and clean-up, lingering oil can cause significant adverse impacts on receptors and natural resources, affecting biodiversity, ecological succession, and bioaccumulation (primarily in shellfish). The socio-economic activities affected include tourism amenities, desalination and cooling water intakes, wild fishery market closures, and oiling of seafood aquaculture facilities. In addition to any crew fatalities and injuries, human health is affected in some receiving environments. Impacts of some spills are well-documented, and we do not cover them here in detail. This section examines lessons from case studies of spilled oil fate, behaviour and effects, how they are assessed, and how they drive evolving clean-up options.

Summary data are given in Table 1 for 24 larger tanker spills worldwide, showing key references in a range of locations, 50% European. Although smaller, the last three are included by the International Tanker Owners Pollution Federation (ITOPF). In 33% of these spills, all outside Europe, no opportunity for study arose or impacts were not assessed (N/A).  
Table 2 shows the approximate costs of the oil spills in this study (footnote [b](https://www.sciencedirect.com/science/article/pii/S0964569120304166" \l "tbl1fnb) in Table 1). In addition to the cause, size and oil type, the costs depend on weather conditions at the time, geographic location, access, security, geopolitics, governance, legal circumstances, and affluence in the affected region. The limit of insurance liability also drives/minimises costs. If, despite the ‘polluter pays’ principle, no spiller OSR is forthcoming, then government, United Nations (UN), European Commission (EC), ITOPF or non-governmental organisations (NGOs) may assist.

Over the two decades following ‘Torrey Canyon’ there were two further landmark spills: March 16, 1978 ‘Amoco Cadiz’; and March 24, 1989 ‘Exxon Valdez’. All three incidents catalysed international efforts to prevent spills, improve response and examine ecological impacts. Responders did not get it right every time, but by getting it wrong in new and imaginative ways they gradually made fewer mistakes. ‘Torrey Canyon’ was bombed by the RAF using high explosives and napalm. The first-generation dispersants sprayed and poured onto shorelines were industrial cleaning products (mostly aromatic hydrocarbons) that did more damage than Kuwait crude oil alone. After the ‘Amoco Cadiz’ spill (Iranian light and Arabian crudes), shoreline clean-up involved the French army removing an oiled saltmarsh. ‘Exxon Valdez’ (Alaska North Slope) crude oil was cleaned from rocky shores using hot seawater and pressure washing that was controversial: effective if the perception was that all oil had to be removed, but not necessarily using net environmental benefit analysis (NEBA).

In a spirit of cooperation, experts from industry, government, civil society and multilateral agencies lobbied, funded and conducted R&D. The Environmental Sensitivity Index (ESI) was developed to prepare for oil spills including in remote areas (Gundlach and Hayes, 1978). Entering into force in 1983, the IMO International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) was instrumental in preventing tank washing at sea and improving ports' waste reception facilities. Spill compensation schemes were refined (summarized in ITOPF, 2020b). Spill trajectory modelling, aerial surveillance and clean-up technologies improved the oil encounter rate at sea and the effectiveness of oil recovery equipment (pumps, booms, skimmers). Lower-toxicity chemical dispersants and aerial spraying capability came together. The reluctance to use dispersants after ‘Torrey Canyon’ was overcome for some spills where resource managers agreed that NEBA might result in less impact than oil alone. Training improved in deployment and monitoring the effectiveness and effects of countermeasures. As part of the OSCP, stockpiles of OSR equipment were created, and ‘spill drills’ simultaneously became world-class and routine. To improve OSR, clean-up cooperatives were established from 1985. Lessons learned were documented and fed back into the revised plans and clean-up manuals.

For positive outcomes to spills, a strategy and a well-rehearsed, tactical OSCP are both needed. These enable responders to apply the technical data and scientific knowledge that are codified in regulations, procedures, guidelines and advice. The uneven COVID-19 response worldwide has shown the critical importance of international coordination and rigorous testing of contingency plans. The UK central government and others failed to ask, let alone answer the right questions, as can be seen by substituting the COVID-19 equivalent in the following OSCP questions (Table 3; see section 4.1).

Experiments conducted in the field, in the laboratory and at the meso-scale (e.g. tank tests and enclosed ecosystems), refined and confirmed many of the observations from oil spill case studies. Seminal work was conducted by scientists from the Field Studies Council (FSC) Oil Pollution Research Unit in Wales, who among others were also engaged in environmental monitoring of coastal refinery discharges and the proliferating oil and gas fields in the North Sea and elsewhere. Despite the inevitable blind alleys in oil spill R&D, learning from the mistakes and moving quickly on were hallmarks of the progress that was needed. The experimental, adaptive management approach facilitated controlled comparisons between clean-up options, leading to development of practical OSR guidelines that in turn informed contingency plans. The FSC and other natural history NGOs have wider historical, ecological and cultural importance, including tracking the evolution of perception and ethics in environmental learning (Berry and Crothers, 1987).

It seemed that the coincidental 11-year intervals between the three landmark spills were enough to make real progress. And yet it was too long because funding as well as public and professional vigilance dwindled before the next large spill. ‘Amoco Cadiz’ and ‘Exxon Valdez’ were cases that were heard or settled in US courts. Not content with the international compensation schemes that limit the spiller's liability (mainly relating to tankers), after ‘Exxon Valdez’ the USA quickly ratified the Oil Pollution Act 1990 (OPA 90). This created a comprehensive prevention, response, liability and compensation regime for oil pollution in US navigable waters (fresh and marine) and from all vessels and other facilities including offshore platforms. The Americans developed a formal process for Natural Resource Damage Assessment (NRDA), alongside compelling musical (Zappa, 1993) and artistic perceptions (Troll, 1989, Fig. 1).

Apart from NRDA, oil spill impact assessment was not standardised, and remained an evolving, patchy process. Many spills had no impact assessment and even those for ‘Torrey Canyon’, ‘Amoco Cadiz’ and ‘Exxon Valdez’ came from separate sources (Table 1). Tracking recovery from multiple inputs against fluctuating baselines can take decades (Hawkins et al., 2017). In addition to official assessments, essential knowledge was gained from experience, case studies and expert reviews during ‘peacetime’ between spills. In place of anecdotal data there was better understanding of the physics, chemistry and biology of oil spill behaviour and effects.

Some complained about the high cost and litigious nature of the ‘Exxon Valdez’ response, but the thorough science undoubtedly improved reliability of impact assessments. ‘Exxon Valdez’ technical innovations were deployed later in other spills (e.g. ‘Deepwater Horizon’ blowout in 2010, section 3.2.4). The multi-agency Shoreline Clean-up Assessment Technique (SCAT) included ground and aerial survey methods that, with early Geographic Information Systems (GIS), were pioneered in the ‘Exxon Valdez’ response. The Global Positioning System (GPS) and field computers later helped long-term impact surveys and NRDA. Fine sediment particle interaction with oil was shown to influence oil behaviour, and prolonged deep (>1m) oil penetration into coarse sediments was studied in unprecedented detail (Fig. 2).

The advanced chemistry forensics, oil source fingerprinting, bioremediation trials, and wildlife and cultural resource programmes benefitted all sides in the ‘Exxon Valdez’ case. These innovations are still widely applied. Cultural resource studies used First Nations anthropology expertise from Alaska and British Columbia. The involvement of local communities continued after the spill (e.g. Alaskan Regional Citizens' Advisory Councils). In contrast, in some recent spills and geographies a science-led response seems impractical, cursory, and not always reliable or inclusive of local and indigenous communities (section 3.3).

3.2. Growing recognition of oil's global impact

3.2.1. Changing circumstances

At the end of Soviet communism (1991) and South African apartheid (1994), the years 1991–2002 saw growing democratic values, a sense of optimism, improving technology, and increasingly sustainable development. From 1991 to 2000 IPIECA produced 10 habitat-specific guidelines on oil pollution impacts, OSR and NEBA. Three key UN conventions on biodiversity, climate change and desertification followed the Rio Earth Summit (1992). In that year, tanker spill compensation liability limits were expanded to $280 million (M). In a temporarily ‘unipolar’ world where ascendant USA was committed to multilateralism, a UN agency with oil spill remediation and reconstruction responsibilities was created to assist recovery from the 1991 Gulf War (section 3.3.1).

The average numbers/decade of medium and large oil spills from tankers halved between the 1970s and 1990s. The reduction since the 1970s is now more than an order of magnitude, thanks to public pressure and better environmental management (e.g. effective regulation, standards, certification, audit, prevention, surveillance and reporting; Fig. 3).

Estimated oil inputs into World Oceans from shipping and other (including unknown) sources were 4 million t/year during the 1990s (Fig. 4).

The inverse, but not causal, relationship between rising emissions/concentrations of CO2 and falling oil spill frequency is shown in Fig. 5. The juxtaposition and common inflection points in the early 1970s are striking. After the OPEC oil embargo in 1973, the reduction in spills' frequency (if not always their size) was sustained in spite of tanker trade increasing from c. 60 to 100 million t/year between the 1970s and 2000s. There is a huge difference between c. 4 million t/year of oil inputs to the oceans from all sources and c. 30 billion tons of CO2/year emitted to the atmosphere. Oil spills are a low but highly visible hazard generating historically high levels of public outrage. In total contrast, anthropogenic climate change is an extreme hazard that until recently has produced little outrage, considering the acceleration in CO2 inputs 50 years ago, when a ‘red flag’ should have been raised (Fig. 5).

Being unaware of climate change was the norm in 1970 but to deny it after the early 2000s is indefensible, given that the challenge of necessary adaptation far outweighs that presented by spills. Dismantling UN agreements is not the way forward. Instead, climate emergency planning is essential with UNFCCC taking the lead. Mitigating and adapting to the increased frequencies of extreme events also demands active transformation across society, industry and government.

3.2.2. Winter(s) of discontent (Shakespeare, 1597)

Despite the general downward trend in number of tanker spills (Fig. 3), there was a spate of large spills from 1991 to 2002, mostly during northeast Atlantic winters (footnote [b](https://www.sciencedirect.com/science/article/pii/S0964569120304166#tbl1fnb) in Table 1). The adverse impacts of these spills did not change the whole direction and pace of oil spill response R&D as did the three landmark spills. This does not mean that the 1991–2002 spill record was acceptable; the large spills of the 1990s were a wake-up call to re-establish the positive trend. Innovative approaches to clean-up were developed on cliff coastlines using climbers, and R&D was commissioned into responses to spills of heavy oils.

The ‘Haven’ (Iranian heavy crude) and ‘Aegean Sea’ (Brent crude) spills burned and caused severe impacts and fishery closures. The latter vessel was a modern double-hulled tanker, as mandated by OPA 1990 for US trade, and yet she broke up and burned on the waterfront in the evacuated centre of La Coruña. Burning oil slicks floated >5 km across the bay setting fire to maritime cliff vegetation near Breixo. This failure of prevention shows that improvements in tanker design and also in countermeasures are not a panacea, due to variations in oil spill behaviour, weather and human factors.

The ‘Braer’ and ‘Sea Empress’ both grounded in protected conservation areas, although each spill had rather less adverse impact than originally feared. The ‘Braer’ lost 85 000 t of Gullfaks oil as she broke up near the shore, but storm-force winds meant hardly any of the light crude oil stranded. Most oil evaporated or carried as aerosol overland. Remaining oil formed dilute oil-in-water suspensions in the water column. The ‘Braer’ cargo and bunkers were a total loss, with one-third eventually settling out with fine particles that had been suspended by the storm. The ‘Sea Empress’ losses of 72 000 t of Forties blend crude oil were mainly dispersed by February gales and effective use of chemical dispersants on the ebb tide before she was brought into the shelter of Milford Haven. Some bunker oil persists along with historic inputs sequestered in fine-grained sediments of the estuary. Nevertheless, it seems large oil tankers can suffer grounding or destruction on or near the shoreline without long-term ecological impact. It would have been a very different outcome if ‘Braer’ or ‘Sea Empress’ had foundered two months later, in the seabird breeding season.

In contrast, the persistence at sea of a relatively small spill of 20 000 t heavy fuel oil (HFO) lost in midwinter from ‘Erika’ led to probably the worst seabird kill in Europe, and heavy shoreline impacts. The ‘Erika’ and ‘Prestige’ HFO spills prompted improvements of spill response for this problematic oil type, better international cooperation in the European Union (EU), and HFO spill compensation under the 2001 Bunkers Convention. The formation of a viscous water-in-oil emulsion (‘mousse’) from HFO or crude oil under wave action creates a much higher volume of plumage-clogging, persistent pollutant that is also difficult to skim and pump. Galicians cried “Never Again” as they manually retrieved oil from ‘Prestige’ (Fig. 6).

One exception to these NE Atlantic incidents was the ‘Katina P’ spill of 66 700 t HFO in Mozambique, severely oiling 3 km of mangroves in Maputo Bay and less severely 1450 km in total (550 km in South Africa). The ship's ‘innocent passage’ was nothing to do with Mozambique, but Table 2 shows that the government did not receive much of their damage claim. This was harsh considering that 15 years of post-colonial civil war still had four months to run, with small arms fire heard during clean-up (Little, 2018).

Another problem with HFO is that there is low demand due to the welcome move away from its use in power generation, to protect air quality. Consequently it is surplus and cheap, leading to a perverse incentive for ocean-going ships to burn highly-polluting HFO with c. 1 billion t/year GHG emissions still not adequately controlled by IMO. In each of the above spills a substantial proportion of the HFO was burned or spilled along with the cargo. They all involved environmental and economic impacts including fishery closures. Each had novel features and was traumatic for local communities, and all became media events.

Despite, or maybe because of colourful and immediate media coverage of the 1990s incidents, public perceptions of these spills were increasingly subject to spill fatigue. In the long-run the 1990s incidents will not be regarded as R&D landmarks of the magnitude of ‘Torrey Canyon’, ‘Amoco Cadiz’ and ‘Exxon Valdez’. These were landmarks not because of their size; after all, ‘Exxon Valdez’ lost ‘only’ 37 000 t. Rather, it was because they led to step changes in spill prevention, OSR capability, and lasting improvement in environmental understanding, all of which had been demanded by public opinion. Some of the innovations diffused very slowly. After ‘Exxon Valdez’ the UK scientific approach was improved, although not until 2007–9 were SCAT and advanced chemistry methods from Alaska fully codified in practical guidelines in UK scientific contingency plans (PREMIAM, 2009; 2018).

3.2.3. Concern shifts from spills to climate change

Although GHG impacts did not feature significantly in environmental impact assessment (EIA) until the new millennium, NGOs and the public were beginning to focus less on individual oil spills than on other concerns, including global warming. This focus was sharpened in 2005 by Hurricane Katrina and Vice-President Gore's ‘An Inconvenient Truth’ (Sheppard, 2012). By 2013, climate change and biodiversity were integrated into EIA more prominently in European Union guidance (EU, 2013).

Although public concern over spills remains a leading driver of opposition to coastal pipelines and tankers in places such as British Columbia, the oil that is not spilled is in fact the real problem. For example, spilled oil sedimenting out in an accretional environment is carbon that in effect is sequestered. The universal burning of fossil fuel is the main culprit in man-made global warming. Hydrocarbon combustion and agriculture are the main global stressors where the public (by exercising consumer choice) can play an urgent part in mitigating. A comparatively small contribution to global warming comes from oil spills, and this is mostly from the evaporation of volatile organic compounds (VOCs) from oil spilled at sea (and also welcomed by responders because it reduces shoreline impacts). Contributing to global warming from the upstream industry during leaks and upset conditions are potent GHGs such as methane, in particular from the industrial northern hemisphere. Downstream processing and retail sites have successfully improved VOCs capture and recovery.

Safety and high utilization (e.g. waste and emissions minimisation) are paramount for as long as we continue to use hydrocarbons. However, the pace of replacement of fossil fuels by renewables must now rapidly accelerate. Renewables technologies including hydroelectric projects are improving all the time, and some costs are coming down. There are concerns that lithium, palladium and rare earth elements (REE) used in batteries, fuel cells and other renewables processes lead to adverse impacts of mining (onshore, in the deep sea, and potentially off-planet). Conflicts might arise over access to REE resources due to their geopolitical scarcity. Nuclear power will remain a primary energy source beyond fossil fuels, partly because safe storage of radioactive wastes demands sustained expertise and vigilance.

3.2.4. When life looks like easy street there's danger at your door (Hunter and Garcia, 1970)

After about 2002, the oil industry must have seemed under control to the wider public, as headlines were not dominated by major oil spills. To secure their licence to operate, steady improvements had been made in the regulation and reduction of spills and drilling mud emissions from offshore oil and gas fields on continental shelves and in ever-deeper or colder waters. Whether the spills occur from tanker accidents, in E&P operations, from land-based sources, or down the drains of our industrial or housing estates, the cumulative knowledge gained can be effectively applied. It is possible to get through the emergency phase and manage OSR as a project like any other, preferably with transparent cooperation among industry, government, scientists, NGOs, media and public.

A lower visibility of pollution should not mean complacency. During 2002 there were other serious and ongoing distractions: the burst of the ‘Dotcom Bubble’; Severe Acute Respiratory Syndrome (SARS) spreading human-to-human from Guangdong, China; and the aftermath of the 9/11 attacks in USA leading to the ‘War on Terror’ and the 2003 invasion of Iraq. Before it can be regarded a success, any response to oil spills (or chemical accidents, or viral pandemics) must protect lives and minimise health and safety impacts. At the same time, responders must trade-off economic/cultural resource impacts against adverse ecological impacts. As we see in COVID-19, getting these trade-offs right, documenting, validating and communicating them in a truthful, balanced way in the glare of the media, is the difficult part.

Step forward Tony Hayward CEO of BP, after the explosion and blowout of the ‘Deepwater Horizon’ drilling rig on April 20, 2010 in the Macondo prospect, Gulf of Mexico. With massive oil releases of 700 000 t from the seabed wellhead showing live on subsea video over four months, BP could not be shielded by their hierarchy of contractors. Outsourcing by BP had already been intensified by the previous CEO John Browne, but some deep water technological challenges were new. Serious doubts about blowout preventers were raised, prompting rapid and business-interrupting risk reassessments in the E&P industry around the world. Media and other stakeholders including President Obama sensed a BP cost minimisation back-story. Public perception darkened dramatically as Mr Hayward, while sympathising with the affected communities, declared: “We're sorry for the massive disruption it's caused their lives. There's no one who wants this over more than I do. I would like my life back”.

3.3. Problem spills during conflicts

3.3.1. Desertshore (Nico, 1970)

3.3.1.1. Gulf War spills

Away from TV cameras there were glimpses of other lives not being ‘back’, especially in war zones. These were spills that can make all the above seem ephemeral and colourful despite their impact. Even larger than the ‘Deepwater Horizon’ spill, the 1991 Gulf War spills (1 000 000 t) and fires in Kuwait were caused by sabotage by retreating Iraqi forces under Saddam Hussein. The spills were the first to be branded as eco-terrorism. The slicks contaminated 800 km of coastline including bays choked with oil in Saudi Arabia almost to Qatar. Much of the sediment infaunal community died when their burrows filled with oil, and algae bloomed in the absence of invertebrate grazing. Channels blocked by layers of algae and fine sediment led to feedback loops that changed the drainage hydrology and ecology of the tidal flats.

An inter-disciplinary impact assessment was made in 1991–1993, representing a high point in international cooperation in oil spill science. A special issue of Marine Pollution Bulletin (MPB, 1993) described the scientific response including the 100-day ‘Mt Mitchell’ marine survey in 1992. The survey produced scientific data, fostered environmental awareness and cooperation among 140 scientists from 15 nations, and was organised by: International Oceanographic Commission (IOC); UNEP; Regional Organisation for the Protection of the Marine Environment (ROPME); US National Oceanic and Atmospheric Administration (NOAA); and Marine Spill Response Corporation (MSRC). Because oiling conditions and impacts were likely to have changed in the decade since these international surveys just after the Gulf War, intensive shoreline monitoring and rapid ecological assessment surveys in Saudi Arabia were undertaken in 2002–3. The degree of change 1993–2003 was assessed by building on SCAT, modified for vegetated, burrowed, carbonate sediments. More than 3100 transects were surveyed, almost 26 200 total petroleum hydrocarbon (TPH) samples and 2660 fingerprinting samples were analysed.

Chemistry analyses were carried out in a state-of-the-art analytical chemistry laboratory established by Battelle close to the affected areas. The trained analysts produced top-notch data that was used later to calibrate SCAT field observations on oil character, to assess oil weathering, and to predict toxicity and ecological effects. The spills left TPH concentrations in visibly oiled sediment from 3200 mg/kg to 41 000 mg/kg. This oil persistence occurred despite the emergency response and initial clean-up. Using estimates of the volume of oiled sediment, this approximates to the total amount of oil lost by either the ‘Braer’ or ‘Sea Empress’. Less than ten years after these latter spills in high-energy areas, traces of remaining oil in sediment had been practically undetectable. In contrast, free-phase brown oil was visible after 20 years trapped in low-energy shorelines of the Arabian Gulf (Fig. 7).

3.3.1.2. UN Compensation Commission (UNCC)

All oil spills caused by armed hostilities are hard to respond to, and unfortunately they are not covered by insurance and compensation funds. And so a new agency, the UNCC, was created after the first Gulf War. The necessary funds were raised from the sale of otherwise sanctioned Iraqi oil exports that were also used, amid some controversy, to fund emergency food and medical aid. From 1991, 2.6 million individual claims totalling $352B for wartime losses and compensation were processed by UNCC. Of these, after scrutiny by UNCC, about 70 claims were awarded for all losses ($52.4B). Of these, in 2005 the Follow-up Programme for Environmental Awards (F4) under Decision 258 awarded a total of $4.3B to Kuwait, Iran, Jordan and Saudi Arabia (Table 2).

Added to the initial response this was the most expensive spill between ‘Exxon Valdez’ in 1989 and BP's 2010 blowout. The $4.3B included $0.51B for contracts in Saudi Arabia covering coastal remediation and restoration projects, and concentrating on the worst-hit locations at the time (2003 data). In addition, $6.17M was awarded for the creation and management of several marine protected areas (MPAs) elsewhere in Saudi Arabia. In the decade since the design of a visitor and educational centre, it is not known if lack of progress in MPA designation is due to poor disclosure or graft.

During 2007, teams of independent reviewers (IRs) for the F4 programme were organised by UNCC under contract to recipient states. Baseline IRs surveys took place in 2007–8 with the respective national focal point (NFP). In the hiatus after the 2002-3 surveys, the UNCC noticed in 2009 that there were two parallel NFPs in Saudi Arabia. One of these had already awarded a design contract for salt marsh remediation, initially costing more than the entire 'Haven' or 'Braer' response (Table 2), and which UNCC adjusted downwards.

After further scoping by the NFP, IRs and UNCC during 2009, tidal flats were added to marshes in the planned contracts. The coastal F4 contracts in Saudi Arabia were for clean-up and restoration of 1800 ha of heavily-oiled saltmarsh and intertidal flats, covering the worst areas of lingering oil. The projects to refresh the blocked channels, excavate new channels, transplant mangroves, till sediment flats, and monitor all operations were designed and supervised by a team of experienced environmental scientists (Pandion Technology-RPI, 2003). The team included some who took part in the shoreline surveys in both 1991–93 and 2002–3. Progress was at last being made, due to leadership continuity and an approach using field experiments and adaptive management. The low-profile remediation included sign-off by quantity surveyors. Saudi Arabian restoration is still ongoing 30 years after the Gulf War.

The Saudi Arabia NFP was supported by advice from the regional offices of three of the ‘big four’ accountants (EY, KPMG, and PwC). One of these firms designed an accrual-based project accounting system because at the outset only cash-based accounting was in place. The first and smallest contract awarded was almost $10M for chemistry laboratory services. However, during the period of most intense remedial design and fieldwork, very few samples were analysed reliably, mostly overseas, despite the IRs' questions in their visits and six biannual reports (January 2010 to October 2012). In reply, there was no mention of the fit for purpose chemistry laboratory created in 2001 to compare sediment contaminants data to those from 1991 to 1993. Decadal sampling to compare sediment contamination could by now have been in its fourth collection phase, continuing the high standards set in 1992 (MPB, 1993) and by Pandion Technology-RPI (2003).

Including quantity surveyor and chemistry contracts, seven terrestrial and 13 marine remediation contracts covered most of the Saudi Arabia F4 programme. Information on bidders was scant. Few had demonstrable qualifications (e.g. website), which made it hard to check their remediation experience and identify possible collusion among firms. Improbably for competitive tendering, the winner and runner-up bids in each of the 20 contracts were separated by as little as 0.05% of the price. Across all contracts, there was low statistical probability (p < 0.005) that the significant separation of the two front-runners from the remaining bids occurred by chance. The IRs asked how this had occurred, but got no answer.

With all major contracts awarded and most payments disbursed to recipient nations, the UNCC wrote its final report on the F4 awards in 2012–2013 (UNCC, 2016). The Saudi Arabia IRs disagreed when in Decision 269 UNCC declared its mandate fulfilled by the systems and assurances for recipients to continue without independent review. At the disengagement of the UNCC, the unresolved issues included stakeholder engagement, oily waste management, provision of hydrocarbon data, creation of seed banks for desert re-vegetation, site protection and designation of MPAs. Apart from RPI's technical publications (e.g. Minter et al., 2014), there was little transparency since the departure of the Saudi Arabia IRs team and UNCC in 2012–2013.

3.3.2. Multiple activities of UN agencies

The UNCC had only one mission, albeit a huge one. As a consequence, UNCC was not available to assist in 2007 when requested by UN Development Programme (UNDP) following another deliberate Middle East oil spill in July 2006, this time in Lebanon. In retaliation to rocket attacks on Israel by Hezbollah, a fuel oil spill of 15 000 t (and fire c. 55 000 t) was caused by the Israeli Defence Force bombing El-Jiyeh power station in southern Lebanon (UN, 2007).

Spill assistance was by the EC, ITOPF, International Union for the Conservation of Nature (IUCN), and the following UN agencies: IMO Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC); Food and Agriculture Organisation (FAO); UNDP; UNEP; UN Educational, Scientific, and Cultural Organisation (UNESCO, focusing on Byblos World Heritage Site); World Bank; and World Health Organisation (WHO). UN estimated spill costs at $203M (1% of 2006 Lebanon GDP, and 28% of total war damage). Funding was by UNDP and OPEC, but only $15M of the estimate was paid by 2007 (Table 2).

Despite UNCC experience with planning environmental restoration after the Gulf War spills and various agencies’ work in Lebanon, the UN system had difficulty coordinating these responses amid rising tensions in the region. This was not helped by the lack of success in gaining compensation from Israel, despite repeated UN Resolutions over 13 years to “direct Israel to respond with prompt and adequate compensation” (UN, 2019).

Briefly and without success, UNEP was considered from 2013 as a possible successor to UNCC to track progress in the ongoing Gulf War spills restoration (section 3.3.1). This did not happen, perhaps because UNEP was getting involved in assessment of the environmental effects of the Syrian civil war, including the use of chemical weapons by President Assad on his own people. As far as is known, there are no plans to revive UNCC despite the impacts of ramifying conflicts in the oil-rich region, for example the civil war in Libya or the aftermath of Daesh warfare across the fertile crescent of Iraq and Syria.

Oil spills are highly probable in Yemen due to ongoing civil war. A ballast tank was breached on the tanker ‘Syra’ after striking a mine in the Gulf of Aden on October 2, 2020. Another tanker ‘Safer’ was used as a floating storage and offloading (FSO) terminal until 2015, but now is held hostage with 155 000 t of Marib crude oil that threatens conservation sites in the Red Sea and Gulf of Aden (e.g. Farasan Islands, Socotra). The UN has been prevented from inspecting the FSO since 2019 (BBC, 2020a).

3.3.3. Ogoniland conflict: foreign companies dey Africa carry all our money go (Fela, 1981)

3.3.3.1. UNEP in ogoniland

By early 2007 after the Lebanon spill, UNEP was invited by the federal government to assist in a post-conflict response in Ogoniland in SE Nigeria. Ogoniland is part of what was called Biafra in the Nigerian civil war (1967–1970). The problems of gross oil pollution over decades had overwhelmed the capacity of industry and government to respond. However, in this case the local population density is high and most people are extremely poor. Despite the much smaller size of the individual Niger Delta spills compared to all the above examples, the environmental and social impacts are severe and tensions very high. So much so, that no oil production has been possible in Ogoniland for almost three decades. The deadlock came about because of civil and NGO protests that were met with a violent federal government response, leading to the trial and execution on November 10, 1995 (BBC, 2020b) of nine Ogoni leaders and writers including ‘Ken’ Saro-Wiwa (2013).

Neonatal mortalities are twice as high within 10 km of Niger Delta oil spills. Comparing pairs of siblings born to the same mother but conceived respectively before and after a documented nearby oil spill, there is a significant increase in neonatal mortality of 38.3 excess deaths/1000 live births (n = 23 000) according to Bruederle and Hodler (2018). Their paired sample design controlled for other factors than nearby oil spills, and found that oil spills occurring before conception are killing in their first month of life as many as 16 000 infants per year in the Niger Delta. Public health, housing, food and cooking fuel, sanitation, waterways, recreation, cultural life and livelihoods in Bodo are heavily dependent on local natural resources in the mangrove-dominated coastal zone. This contrasts with the sparse population and greater per capita wealth of Saudi Arabia, where the affected marshes are almost devoid of human activity.

Unlike all the major tanker spills described above, the poor in local communities affected in the Niger Delta are cast in a frankly colonial mentality as being part of the problem rather than for the most part as victims of criminally inadequate environmental practices. By stereotyping the local people as oil thieves, the western oil companies betray the majority of people of the Niger Delta while continuing to sell the oil. International oil companies have operated profitably in the Niger Delta since 1956 (Shell) and 1962 (ENI and Total). Potentially complicit parties include Nigerian National Petroleum Corporation (NNPC), Nigerian federal and local governments, judiciary, security forces, shareholders and pension funds (including those of the Church of England). To solve this, all that must be done is to uphold the rule of law (Fig. 8, Fig. 9).

Environmental surveys have previously been completed (1980 Funiwa #5 20 000 t offshore well blowout; 1983 onshore production areas; 1995 delta-wide; and 1997 Niger Delta Environmental Survey). Each of these involved evermore strategic environmental and socio-economic scope. However, few were able to engage fully with the local affected people by seeking the free, prior, informed consent that inter-governmental agencies and NGOs agree are needed. A breakthrough looked promising in 2007 when the federal government invited UNEP to carry out a baseline survey of Ogoniland to assess the scale of remediation required.

The UNEP project was a detailed multi-discipline survey of air, water, sediment, soil, biota, and a preliminary study of human health, all of which showed that many local people are indeed 'living in oil' (UNEP, 2011). By overcoming logistical challenges and the legacy of mistrust, UNEP succeeded in providing a faltering start in planning the clean-up. A restoration fund of $1B was recommended, including a centre of excellence in remediation technology (Table 2). And so the federal government formed a new agency (Hydrocarbon Pollution Restoration Project; HYPREP). After some confusion between existing agencies charged with regulating oil pollution, if successful in Ogoniland, HYPREP could begin the huge task of clean-up across the entire Niger Delta. The Bayelsa State Oil and Environmental Commission are also now examining regional remediation precedents. But first the endemic oil theft must be stopped, or else any clean-up is futile. Meanwhile, according to the Extractive Industries Transparency Initiative, oil theft is costing Nigeria over $4B/year. This was almost 1% of GDP in 2019, after Nigeria displaced South Africa as the largest African economy. The failure to prevent criminal activity is an ongoing fatal flaw in all restoration plans because repeated inputs of fresh crude oil will inevitably stress or kill vegetation.

A status report on the clean-up published in June 2020 involved revisiting some original UNEP sites (FoE, 2020). The report concluded that a new start is needed across the entire delta. The emergency measures recommended by UNEP over a decade ago to protect human health have not been provided (e.g. replacing drinking water wells contaminated by benzene). No health impacts have been or are being monitored. Most contractors are not qualified; 11 of 16 companies contracted for oil clean-up are reportedly without expertise in remediation. Only 11% of the sites recommended by UNEP for clean-up and remediation are completed. HYPREP has been compromised by conflicts of interest and procurement irregularities, with $31m spent since 2018 not properly accounted for. HYPREP has now recruited new personnel with UNEP and Bodo project experience.

3.3.3.2. Bodo community

Bodo is a Niger Delta fishing village in Ogoniland. Pipeline maintenance failures led to two spills in late 2008 (totalling 580 t Bonny light crude oil). In this area, Shell Petroleum Development Company (SPDC) is the E&P operator on behalf of a joint venture with the NNPC, Total Exploration and Production Nigeria Limited and Nigerian Agip Oil Company Limited (part of ENI). Liability was admitted by SPDC for probably the largest mangrove kill in history, but partly due to endemic security problems it was unable to fix the pipeline, recover the oil, remediate the former mangrove sediment habitats, or restore their high biodiversity and subsistence values.

Despite SPDC experience in numerous smaller delta spills over decades and the back-up of Shell, Total and ENI international experts, a cumulative 1000 ha mangrove forest was killed in Bodo after the two pipeline spills in 2008. Shell, Total and ENI are shareholders in the industry-owned emergency response organisation (Oil Spill Response Limited; OSRL) whose website promises: “Wherever your oil spill risks lie in the supply chain, we are ready to respond with our expertise and resources anytime, anywhere”. It is unclear whether OSRL was asked to deliver on this in 2008 by Shell or the SPDC joint venture. Implementation of the findings of the UNEP (2011) report is now described by subsidiary SPDC rather than Shell Nigeria, whose website link to 'UNEP implementation' appears defunct (Shell Nigeria, 2016). The parent company may be distancing itself from liability for its subsidiary's impacts in Ogoniland, but ultimate responsibility lies with Shell (Shell Nigeria, 2016).

Average TPH concentrations of 40 000 mg/kg were found in the former mangrove sediments seven years after the spills (Little et al., 2018). This is exacerbated by organised criminals who tap the export pipeline crossing Ogoniland to the Bonny Island terminal (Gundlach, 2018). The stolen oil is processed in improvised ‘refineries’ for sale locally and regionally. Fifty-three spills from over 200 illegal refineries occurred 2008–2019, totalling 1165 t of oil. Cooking up oil in leaky oil drums over open fires adds carcinogenic combustion products to the spills of crude oil (Fig. 8).

The Bodo Mediation Initiative (BMI) from 2013 and a successful court case prosecuted by the Bodo community in London in 2014 were both essential to breaking the deadlock with SPDC and getting clean-up underway to international standards, at least in part of the delta. In 2015 Shell settled the compensation claims against the company for $73M (Table 2). The cash was distributed to the individual victims of the Bodo community via newly opened bank accounts. The Bodo community separately agreed that their claim for clean-up would remain in place so that they could return to court in London in future if the BMI clean-up did not meet international standards. Shell tried to strike this out in June 2017, but the community's right was upheld in London in May 2018 (Leigh Day, 2018, Leigh Day, 2020).

Practical fieldwork could only begin in May 2015 after signing of a memorandum of understanding between SPDC and the Bodo community. Crucially, from May through August 2015 SCAT teams started to provide a strong participative framework for the essential scientific and technical aspects. Good agreement between SCAT descriptors and sediment TPH concentrations was established from the 2015 samples (n = 32; Little et al., 2018), and confirmed at-scale in 2017 samples (n = 624; Bonte et al., 2020). The reliance on chemistry sampling for monitoring against target levels is reduced by reaching field consensus on fine-tuning the clean-up methods for the vegetated and burrowed fine-grained sediments of Bodo.

The challenge is to use NEBA for in situ remediation, recognising that clean-up guidelines typically recommend ‘leave-alone’ in such habitats (after the oiled Île Grande marsh was destroyed during ‘Amoco Cadiz’ clean-up; section [3.1](https://www.sciencedirect.com/science/article/pii/S0964569120304166" \l "sec3.1)). Trial work is needed on how much nursery soil is transplanted with the seedlings to insulate them from lingering oil. Such adaptive management would track performance of the young trees as their root ball breaks out of nursery soil, compared to the effect of fresh oil spills on leaves or pneumatophores. Transplanted mangroves can grow successfully in cohesive oily sediments, in contrast with sediments that are flushed for long periods. Such intrusive treatment may produce cleaner sediments, but if they become liquefied then adverse impacts due to water-logging, loss of structure and erosion will delay recovery. In addition to mangrove seedling transplants, success depends on natural spread of healthy propagules. Phytoremediation improves longer-term sediment quality and biodiversity, even if in the short-term oil concentrations are high or temporarily increase (Bonte et al., 2020).

The project stopped for almost two years after violence erupted in October 2015 due to dissatisfaction with the procurement process (Bruyne, 2020). A phase of surficial oil removal between September 2017 and August 2018 was followed by sediment remediation from November 2019, now interrupted by COVID-19. The SCAT process has helped operator and community to embrace new ideas in clean-up. Only by building mutual trust will the inevitable concerns be addressed and tensions defused. The success of BMI and SPDC also depends on reducing the huge inequalities by supporting alternative employment opportunities to take people out of illegal refining.

3.3.4. Mauritius spill

On July 25, 2020 the bulk carrier ‘Wakashio’ grounded on a coral reef in SE Mauritius spilling >1000 t HFO and iron ore cargo. In addition to corals bleached by acidification from climate change, at risk are mangroves, seagrasses, coastal and pelagic birds, fishing communities and tourism. Under pandemic quarantine the vessel was 17% below required manning levels. Her Panamanian flag allowed contract extension such that two crew members had been onboard >1 year, risking crew fatigue. Panama's inspection blamed the incident on the change of course to look for internet signals, an allegation denied by the Japanese owner (PE, 2020). Regional investment in OSR and training has been patchy in East Africa and Indian Ocean, despite the efforts of foreign and UN aid programmes (e.g. Mauritius' coastal oil spill ESI atlas dates from 1989, before many states; Gundlach and Murday, 1989). Mauritius being a major tax haven, funds for OSR contingency planning and pollution control should be in place. In contrast, for the locals only partial sewage treatment is available. Tax avoidance is colonialism by other means, when accountability is as vulnerable as in authoritarian or hollowed-out state sectors (Little, 2018).

4. Discussion

4.1. Songs of innocence and experience (Blake, 1826)

In his poetry in 1789-1794, William Blake does not assume a unidirectional progression from ignorance to awareness, but the duality of human values and belief in the wisdom of young people. In order to overcome our climate crisis ‘learning disability’, we need to challenge authoritarian and paternalistic assumptions about learning. As when we were children, we can see now that many ‘emperors’ of business and government have no clothes (Andersen, 1837).

During COVID-19, economies and world trade struggle, mariners quarantine in their vessels, and layers of uncertainty halt investment. Record-breaking recession and unemployment are inevitable. In democracies, the pandemic response runs a gamut of kind and effective (New Zealand, South Korea) to dangerously incompetent (Brazil, UK, USA). Pandemic had already been identified as a primary threat, and incredibly in retrospect, the UK was rated highly for global pandemic preparedness. In October 2016, ‘Exercise Cygnus’ tested the UK response to an influenza pandemic, and the UK press reported overwhelmed health services, duplication of responsibilities, confusion, lack of preparedness and lack of clarity (PHE, 2017; redacted). Planning lessons got lost in the real emergency of 2020, replaced by confused messaging based on wishful thinking, cronyism in political elites, and expensive, wasteful and opaque procurements. According to the National Audit Office and legal challenges, lessons were neither documented nor revised in COVID-19 arrangements.

Multilateralism represented by agencies of the EU and UN is under assault by resurgent nationalism. Some leaders are emboldened to ignore UN agencies (e.g. WHO in COVID-19 response) and international law, to the extent of undermining multilateral arms-controls. Crisis managers, management consultants and public relations purport to ‘manage complexity’ amid raging political, economic, health and environmental crises. The first two of these preoccupied the Enlightenment economist and statistician Thomas Malthus, FRS. He thought geometric population growth would be limited only by arithmetic growth in food production (Malthus, 1798). This is controversial because rather than wealthy consumers (high-carbon footprint), he ‘blamed’ the demographic problem on the high birth rates of the poor (low-carbon footprint); unsurprising from Professor of Political Economy at the East India Company. Although he did not anticipate the agricultural revolution feeding more people, Malthus' pessimism may yet be vindicated by current stressors on humanity (e.g. cumulative environmental impacts of fossil fuels and modern agriculture).

The pandemic is re-shaping society's interest in science and understanding of the biodiversity/climate crises. The window of opportunity to meet these overlapping challenges places better leadership and governance front and centre of decarbonisation investments. The net-zero technologies are already here, with costs at-scale falling (e.g. hydrogen for fuel cells; lithium and REE batteries; electric multi-modal transport; wind, wave, tidal, solar and hydro-electricity; air- and ground-source heat pumps; carbon capture and storage for heavy industry). In his December 23, 2020 Reith Lecture, Mark Carney said “ask not what the climate is doing to your country, but what your country can do for the climate”.

Without altering the ever-increasing GHG concentrations, the dramatic reduction of noise and toxic emissions during COVID-19 lockdowns gave a glimpse of nature's restorative capacity. Achievement of this vision as we mitigate and adapt to climate change was discussed by Sodha (2020), who argued that ‘cathedral thinking’ is needed to emulate the long-term projects that were not completed during the medieval builders' lifetimes. This perception would help us all to connect with our descendants properly, unlike the rich and powerful continuing to rely on inherited wealth. Young people will bear the brunt of the present crises. Solidarity with their values is our bridge to sustainability. In forging this emotional connection there is a vital role for arts and culture, and no place for culture wars. If we fail to connect, then a shocking metaphor for the ‘ugly’ scenario is visible in Goya's painting ‘Saturno devorando a su hijo’ (Goya, 1820).

4.2. The ‘relationship’ between oil spills and climate change

In the Russian Arctic on 29 May and July 12, 2020, two spills occurred at the giant Norilsk Nickel smelter. They were caused by melting permafrost, subsidence, and failure of a fuel storage tank and pipeline (respectively 21 000 t diesel and 45 t aviation fuels). North towards the Pyasina delta (Arctic Ocean) tundra and lake habitats are important for wildfowl. Environmental agencies requested $2B, referred to variously as compensation, fine, and clean-up estimate. Accusing the operator of negligence, President Putin declared a state of emergency, but a transparent impact assessment is unlikely. The spills were labelled by media “the Arctic's worst-ever environmental catastrophe”, but the melting permafrost and release of methane and CO2 from thawing and burning peat are part of a world catastrophe. Melting ice and permafrost was avoidable until recently, but the Norilsk spills are among the direct effects of anthropogenic climate change reaching ‘tipping point’

### Off

#### The role of the ballot is to determine whether the resolution is a true or false statement – anything else moots 7 minutes of the nc and exacerbates the fact that they speak first and last since I should be able to compensate by choosing – it’s the most logical since you don’t say vote for the player who shoots the most 3 points, the better player wins.

#### Reject their framing on inclusion – they exclude all offense except what follows from their specific fwk which shuts out those without the resources to prepare.

#### The ballot says vote aff or neg based on a topic and five dictionaries[[1]](#footnote-1) define to negate as to deny the truth of and affirm[[2]](#footnote-2) as to prove true which means it’s constitutive and jurisdictional.

### 1nc- CP

#### The United States should support the conditional right to strike for prisoners and implement in all state and federal prisons

#### working program (private sectors) where prisoners can make minimum wage

#### mandatory rehabilitation programs

#### Fund school districts in all Federal prisons

#### Support Second Chance Pell Grants

#### Developing standardized, evidence-based programs to reduce recidivism. NB is strikes are conditional which means we limit unlawful strikes.

#### Solves Case- solves low wages ,cycles of recidivism, allows strikes, and job opportunities

The United States Department Of Justice Archives, "Prison Reform: Reducing Recidivism by Strengthening the Federal Bureau of Prisons,", <https://www.justice.gov/archives/prison-reform> (Loyola IB)

From day one, identifying an inmate’s individualized “criminogenic” needs.  BOP embraces a corrections philosophy that reentry preparation must begin on the first day of incarceration.  The first and most important step in reentry planning is obtaining information about an individual inmate’s risk of recidivating and programmatic needs that will inform development of an individualized reentry plan. Social science research indicates each inmate possesses his or her own "criminogenic factors,"[[1]](https://www.justice.gov/archives/prison-reform" \l "_ftn1" \o ") such as criminal history, substance abuse, and education level. By identifying these factors as soon as an inmate enters custody, the Bureau can ensure that the individual receives appropriate services and can monitor his or her progress throughout the term of incarceration.  In 2016, the Bureau retained an independent social science research organization, American Institutes of Research (AIR), to evaluate BOP’s existing criminogenic assessment tools and to propose improvements.   This evaluation, which will be completed in the fall of 2017, will increase the effectiveness of correctional programs by ensuring the right services are delivered to the right inmates, that these programs are aligned to the risk level and unique needs of each individual, and that all services are delivered at the intensity and frequency necessary to reduce the likelihood of recidivism.

Building a “school district” within the federal prison system. Research shows that inmates who participate in correctional education programs have 43 percent lower odds of returning to prison than those who do not, and that every dollar spent on prison education saves four to five dollars on the costs of re-incarceration.[[2]](https://www.justice.gov/archives/prison-reform#_ftn2)  With guidance from the [Bronner Group](https://www.justice.gov/dag/page/file/914026/download), an educational consulting firm, BOP is building a semi-autonomous school district within the federal prison system and will offer programs for adult literacy/basic skills, high school diplomas, post-secondary education, and expanded opportunities for individuals with learning disabilities.  In November 2016, the Bureau announced that it hired Amy Lopez, a veteran correctional educator, to serve as the first “superintendent” of the BOP school district.  Under the new system, each federal inmate will be assessed upon incarceration to determine his or her education level and determine the type and level of instruction needed.  That “individualized education plan” will follow the inmate through his or her time in BOP’s custody. 

Launching a tablet-based pilot program for inmate education. BOP is launching a pilot program to determine the feasibility of a “blended” education model that combines classroom instruction with online education (provided through tablets customized for the prison environment).   Similar pilots have been successfully launched in Ohio and California.  The pilot program will be rolled out at two prisons in early 2017 and will be expanded to additional sites in future years.  BOP is currently reviewing bids from vendors to provide the necessary hardware and software for the pilot program. 

Supporting the Second Chance Pell Pilot Program.  Second Chance Pell is a [pilot program](http://www.ed.gov/news/press-releases/12000-incarcerated-students-enroll-postsecondary-educational-and-training-programs-through-education-departments-new-second-chance-pell-pilot-program) announced by the Department of Education in July 2015 that will allow eligible incarcerated Americans to receive Pell Grants and pursue postsecondary education with the goal of helping them get jobs and support their families when they are released.  [Seven BOP facilities](https://www.bop.gov/resources/news/20160630_back_to_school.jsp) are participating in this program, which allows select colleges and universities to provide funding to cover tuition, required fees, books, and supplies for inmates seeking educational opportunities. 

Encouraging inmates to develop marketable job skills. BOP is expanding opportunities for occupational training, with a focus on ensuring that inmates develop the job skills they need to find work after release from custody.  As part of this effort, BOP is working to revitalize [Federal Prison Industries](https://www.bop.gov/inmates/custody_and_care/unicor.jsp) (FPI), also known as UNICOR, the agency’s largest and most successful job training program.  Research shows that inmates who worked in prison industries were 24 percent less likely to recidivate and 14 percent more likely to be gainfully employed after release from custody than other inmates.  In 2016, the Bureau hired Gary Simpson, a former manufacturing and operations executive of a Fortune 100 company, to restore FPI’s viability and increase opportunities for inmates.

Developing standardized, evidence-based programs to reduce recidivism.   Research shows that recidivism risk can be effectively reduced through evidence-based programming that targets criminogenic needs, such as courses in cognitive behavioral therapy and other topics.  Inmate programming also makes prisons safer because inmates occupied in productive activities are less likely to engage in institutional misconduct.  As a result, BOP is expanding access to critical [National Programs](https://www.bop.gov/inmates/custody_and_care/docs/BOPNationalProgramCatalog.pdf), including BRAVE and STAGES, and developing new National Programs where programming gaps exist.  To achieve this goal, the Bureau will request additional appropriations to increase its staffing of critical positions, such as social workers, psychologists, and treatment specialists.  This year, the Bureau developed a standardized Release Preparation Program, required for all releasing inmates, that will be offered nationwide.  In addition, the Bureau is streamlining its many locally developed programs to focus on evidence-based programs with a proven track record of reducing recidivism.  As part of this process, the Bureau developed an “[Inmate Model Programs Catalog](https://www.justice.gov/archives/dag/page/file/914011/download),” which contains curriculum guides for about 50 “model” programs that Bureau facilities are encouraged to adopt nationwide.  In addition, the Bureau has developed a new computerized system to better track which facilities are implementing which model programs.  Finally, the Bureau is committed to increasing inmate enrollment in appropriate programs by improving its case management process and providing greater use of incentives.

Prioritizing mental health treatment for inmates.  BOP is working to overhaul its policies on the treatment and care of inmates with mental illness.  Among other changes, in May 2014, BOP [issued new internal guidance](https://www.bop.gov/policy/progstat/5310_16.pdf) prioritizing the use of cognitive behavioral therapy and other evidence-based treatment programs proved to be effective in correctional settings.  Since then, BOP also established a number of “secure mental health step-down units,” which provide housing and treatment for inmates with serious mental illness and a significant history of violence, and has launched a pilot program to provide dedicated mental health staff within restrictive housing units.  In addition, as part of the Bureau’s education reforms, the agency hired its first-ever school psychologist to assist in developing programs for inmates with special learning needs.

Things that we don’t defend and are considered unlawful that the Aff has to defend according to the NLRB

* Strikers physically blocking persons from entering or leaving a struck plant.
* Strikers threatening violence against no striking employees.
* Strikers attacking management representatives.
* Section 8(g)—Striking or Picketing a Health Care Institution Without Notice

[National Labor Relations Board](https://www.nlrb.gov/), https://www.nlrb.gov/

The Right to Strike

Section 7 of the [National Labor Relations Act](https://www.nlrb.gov/how-we-work/national-labor-relations-act) states in part, “Employees shall have the right. . . to engage in other concerted activities for the purpose of collective bargaining or other mutual aid or protection.” Strikes are included among the concerted activities protected for employees by this section. Section 13 also concerns the right to strike. It reads as follows:

Nothing in this Act, except as specifically provided for herein, shall be construed so as either to interfere with or impede or diminish in any way the right to strike, or to affect the limitations or qualifications on that right.

It is clear from a reading of these two provisions that: the law not only guarantees the right of employees to strike, but also places limitations and qualifications on the exercise of that right. See for example, restrictions on strikes in health care institutions (set forth below).

Lawful and unlawful strikes. The lawfulness of a strike may depend on the object, or purpose, of the strike, on its timing, or on the conduct of the strikers. The object, or objects, of a strike and whether the objects are lawful are matters that are not always easy to determine. Such issues often have to be decided by the National Labor Relations Board. The consequences can be severe to striking employees and struck employers, involving as they do questions of reinstatement and backpay.

It must be emphasized that the following is only a brief outline. A detailed analysis of the law concerning strikes, and application of the law to all the factual situations that can arise in connection with strikes, is beyond the scope of this material. Employees and employers who anticipate being involved in strike action should proceed cautiously and on the basis of competent advice.

Strikes for a lawful object.Employees who strike for a lawful object fall into two classes “economic strikers” and “unfair labor practice strikers.” Both classes continue as employees, but unfair labor practice strikers have greater rights of reinstatement to their jobs.

Economic strikers defined. If the object of a strike is to obtain from the employer some economic concession such as higher wages, shorter hours, or better working conditions, the striking employees are called economic strikers. They retain their status as employees and cannot be discharged, but they can be replaced by their employer. If the employer has hired bona fide permanent replacements who are filling the jobs of the economic strikers when the strikers apply unconditionally to go back to work, the strikers are not entitled to reinstatement at that time. However, if the strikers do not obtain regular and substantially equivalent employment, they are entitled to be recalled to jobs for which they are qualified when openings in such jobs occur if they, or their bargaining representative, have made an unconditional request for their reinstatement.

Unfair labor practice strikers defined.Employees who strike to protest an unfair labor practice committed by their employer are called unfair labor practice strikers. Such strikers can be neither discharged nor permanently replaced. When the strike ends, unfair labor practice strikers, absent serious misconduct on their part, are entitled to have their jobs back even if employees hired to do their work have to be discharged.

If the Board finds that economic strikers or unfair labor practice strikers who have made an unconditional request for reinstatement have been unlawfully denied reinstatement by their employer, the Board may award such strikers backpay starting at the time they should have been reinstated.

Strikes unlawful because of purpose. A strike may be unlawful because an object, or purpose, of the strike is unlawful. A strike in support of a union unfair labor practice, or one that would cause an employer to commit an unfair labor practice, may be a strike for an unlawful object. For example, it is an unfair labor practice for an employer to discharge an employee for failure to make certain lawful payments to the union when there is no union-security agreement in effect (Section 8(a)(3). A strike to compel an employer to do this would be a strike for an unlawful object and, therefore, an unlawful strike. Strikes of this nature will be discussed in connection with the various unfair labor practices in a later section of this guide.

Furthermore, Section 8(b)(4) of the Act prohibits strikes for certain objects even though the objects are not necessarily unlawful if achieved by other means. An example of this would be a strike to compel Employer A to cease doing business with Employer B. It is not unlawful for Employer A voluntarily to stop doing business with Employer B, nor is it unlawful for a union merely to request that it do so. It is, however, unlawful for the union to strike with an object of forcing the employer to do so. These points will be covered in more detail in the explanation of Section 8(b)(4). In any event, employees who participate in an unlawful strike may be discharged and are not entitled to reinstatement.

Strikes unlawful because of timing—Effect of no-strike contract. A strike that violates a no-strike provision of a contract is not protected by the Act, and the striking employees can be discharged or otherwise disciplined, unless the strike is called to protest certain kinds of unfair labor practices committed by the employer. It should be noted that not all refusals to work are considered strikes and thus violations of no-strike provisions. A walkout because of conditions abnormally dangerous to health, such as a defective ventilation system in a spray-painting shop, has been held not to violate a no-strike provision.

Same—Strikes at end of contract period.Section 8(d) provides that when either party desires to terminate or change an existing contract, it must comply with certain conditions. If these requirements are not met, a strike to terminate or change a contract is unlawful and participating strikers lose their status as employees of the employer engaged in the labor dispute. If the strike was caused by the unfair labor practice of the employer, however, the strikers are classified as unfair labor practice strikers and their status is not affected by failure to follow the required procedure.

Strikes unlawful because of misconduct of strikers. Strikers who engage in serious misconduct in the course of a strike may be refused reinstatement to their former jobs. This applies to both economic strikers and unfair labor practice strikers. Serious misconduct has been held to include, among other things, violence and threats of violence. The U.S. Supreme Court has ruled that a “sitdown” strike, when employees simply stay in the plant and refuse to work, thus depriving the owner of property, is not protected by the law. Examples of serious misconduct that could cause the employees involved to lose their right to reinstatement are:

Strikers physically blocking persons from entering or leaving a struck plant.

Strikers threatening violence against nonstriking employees.

Strikers attacking management representatives.

Section 8(g)—Striking or Picketing a Health Care Institution Without Notice. Section 8(g) prohibits a labor organization from engaging in a strike, picketing, or other concerted refusal to work at any health care institution without first giving at least 10 days’ notice in writing to the institution and the Federal Mediation and Conciliation Service.

For more information please see the  [Basic Guide to the National Labor Relations Act](https://www.nlrb.gov/sites/default/files/attachments/pages/node-235/basicguide.pdf).

## 1NC-Off

#### CP: The United states should implement the SCR-69 for all states.

CLI 20 [(CLI, California Legislative information),”SENATE CONCURRENT RESOLUTION” , https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\_id=201920200SCR69, Introduced by Senator Bradford August 14, 2019, AMENDED IN SENATE JANUARY 23, 2020] SS

Relative to prisoner compensation.

LEGISLATIVE COUNSEL'S DIGEST

SCR 69, as amended, Bradford. Prisoners: wages.

This measure would express the Legislature’s support for fair and just wages for incarcerated persons working for the Prison Industry Authority, the Division of Juvenile Facilities, and the Department of Corrections and Rehabilitation.

Fiscal Committee: yes

BILL TEXT

WHEREAS, This country has long recognized the value of human labor and the importance of fair wages. California has demonstrated this recognition through its ongoing commitment to offering quality pay careers for Californians through enactments like the California Equal Pay Act; and

WHEREAS, The dignity of every person is inherent, and it is incumbent on the state to protect the dignity of all its citizens; and

WHEREAS, Fair and just wages are intrinsically tied to human dignity; and

WHEREAS, The factors of disparities within imprisonment are partially a result of disproportionate social factors in African American and Latinx communities that are associated primarily with poverty, employment, housing, and family differences; and

#### Solves the aff but avoids the case turns.

## 1nc- T

#### Interpretation: A worker is an employee that works under a contract for employment.

**Quest n.d.** [(Quest, based in Leicestershire, but covering the whole of the UK, is a specialist and training solutions, delivering bespoke professional services with resounding results. With over two decades of experience, Quest make it their responsibility to fully understand your specific needs before personalising a tailored solution to ensure that your HR, Health and Safety and training solution complements your business plan and achieves your goals.) “Employees & Workers: The Difference Between a Worker and an Employee” Quest. N.d.] AW

A worker is defined as either an employee working under a Contract for Employment or someone who works under a contract other than a Contract of Employment and is offering his personal service in return for remuneration to the employer who is not his/her client or customer. These contracts are commonly called Contracts for Services and such workers are often referred to as non-employee workers.

#### Violation: Prisoners don’t have employment contracts—they’re working as a form of punishment.

Zatz 13 [(Noah, Professor of Law at UCLA) “Employment Without Contract? Prison Laborers as Statutory Employees” Paper presented at the annual meeting of the The Law and Society Association 2013-12-16] AT

Paid labor by prisoners is an increasingly important part of incarceration in the U.S. Prison laborers repeatedly have sought legal redress for violations of labor & employment laws, including minimum wage and antidiscrimination protections. Courts then have had to decide whether these protections apply to this form of work, and they have struggled to square the existence of an exchange of labor and economic benefits with an impulse to distinguish a distinctly non-economic field of punishment from a fundamentally economic employment relationship. For the most part, prison laborers have been denied "employee" status on the ground that they do not work in a labor market organized through free contract. This identification of statutory employment rights with individual employment contracts is ironic because, in other contexts, labor & employment statutes often are understood as repudiating contractual orderings. This paper explores how legal classification as "employment" serves not simply as the basis for a regulatory intervention in the labor market but also as a means of constituting and bounding "the market" as a distinct social field.

#### Standards:

#### 1] Limits— Allowing Affs about workers without contracts justifies the slavery, child labor, human trafficking, and indentured servants AC — incentives reading any aff about forced labor that negs don’t have prep on— a] incentivizes running to the margins in order to cut fringe affs— that destroys iterative content mastery which is key to education. B] explodes the negs prep burden to prep for hundreds amounts of affs due to different circumstances that result in forced labor.

#### There are hundreds of affs under their interp— they allow for any instance of forced labor in any of these countries— means that they explode limits.

ILO No Date [(International Labor Organization, The only tripartite U.N. agency, since 1919 the ILO brings together governments, employers and workers of 187 member States , to set labour standards, develop policies and devise programmes promoting decent work for all women and men.) “Statistics on forced labour, modern slavery and human trafficking,” ILO, No Date, <https://www.ilo.org/global/topics/forced-labour/policy-areas/statistics/lang--en/index.htm>] RR

Global estimates on forced labour

Map

Description automatically generated

Global estimates 2012: Results and Methodology

Summary of the ILO 2012 Global Estimate of Forced Labour

Profit estimates of forced labour

Chart

Description automatically generated

Profit estimates 2014: The Economics of Forced Labour

Profits and Poverty: The Economics of Forced Labour - Executive Summary

ICLS and forced labour

The 19th ICLS (International Conference of Labour Statisticians) in 2013, adopted the Resolution II concerning further work on statistics of forced labour recommending that the Office set up a working group with the aim of sharing best practices on forced labour surveys in order to encourage further such surveys in more countries. The working group should engage ILO constituents and other experts in discussing and developing international guidelines to harmonize concepts, elaborate statistical definitions, standard lists of criteria and survey tools on forced labour, and to inform the 20th International Conference of Labour Statisticians on the progress made.

Based on this decision, the ILO has initiated the "ILO Data Initiative on Modern Slavery ", a global research programme to take stock of national and international initiatives measuring forced labour, human trafficking and slavery, to discuss strengths and limitations of existing methodologies and build a consensus on concepts, statistical definitions and standard list of criteria, survey tools and estimation methodologies which could be used to develop surveys in the future.

#### 2] Ground— all the neg can say against the aff is exploitation good— their interp skirts links to the Workforce DA, Business Confidence DA, Cap K because the workers Affs under their interp are about do not participate in the formal economy. We even lose access to the Kant and Contracts NC which all assume an injury to legally recognized contracts.

#### 3] TVA solves— read as an advantage to a US specific aff.

#### Cross apply Paradigm issues from above.

# Case

### Framework

#### Reducing existential risks is the top priority in any coherent moral theory

Plummer 15 (Theron, Philosophy @St. Andrews http://blog.practicalethics.ox.ac.uk/2015/05/moral-agreement-on-saving-the-world/)

There appears to be lot of disagreement in moral philosophy. Whether these many apparent disagreements are deep and irresolvable, I believe there is at least one thing it is reasonable to agree on right now, whatever general moral view we adopt: that it is very important to reduce the risk that all intelligent beings on this planet are eliminated by an enormous catastrophe, such as a nuclear war. How we might in fact try to reduce such existential risks is discussed elsewhere. My claim here is only that we – whether we’re consequentialists, deontologists, or virtue ethicists – should all agree that we should try to save the world. According to consequentialism, we should maximize the good, where this is taken to be the goodness, from an impartial perspective, of outcomes. Clearly one thing that makes an outcome good is that the people in it are doing well. There is little disagreement here. If the happiness or well-being of possible future people is just as important as that of people who already exist, and if they would have good lives, it is not hard to see how reducing existential risk is easily the most important thing in the whole world. This is for the familiar reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. There are so many possible future people that reducing existential risk is arguably the most important thing in the world, even if the well-being of these possible people were given only 0.001% as much weight as that of existing people. Even on a wholly person-affecting view – according to which there’s nothing (apart from effects on existing people) to be said in favor of creating happy people – the case for reducing existential risk is very strong. As noted in this seminal paper, this case is strengthened by the fact that there’s a good chance that many existing people will, with the aid of life-extension technology, live very long and very high quality lives. You might think what I have just argued applies to consequentialists only. There is a tendency to assume that, if an argument appeals to consequentialist considerations (the goodness of outcomes), it is irrelevant to non-consequentialists. But that is a huge mistake. Non-consequentialism is the view that there’s more that determines rightness than the goodness of consequences or outcomes; it is not the view that the latter don’t matter. Even John Rawls wrote, “All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy.” Minimally plausible versions of deontology and virtue ethics must be concerned in part with promoting the good, from an impartial point of view. They’d thus imply very strong reasons to reduce existential risk, at least when this doesn’t significantly involve doing harm to others or damaging one’s character. What’s even more surprising, perhaps, is that even if our own good (or that of those near and dear to us) has much greater weight than goodness from the impartial “point of view of the universe,” indeed even if the latter is entirely morally irrelevant, we may nonetheless have very strong reasons to reduce existential risk. Even egoism, the view that each agent should maximize her own good, might imply strong reasons to reduce existential risk. It will depend, among other things, on what one’s own good consists in. If well-being consisted in pleasure only, it is somewhat harder to argue that egoism would imply strong reasons to reduce existential risk – perhaps we could argue that one would maximize her expected hedonic well-being by funding life extension technology or by having herself cryogenically frozen at the time of her bodily death as well as giving money to reduce existential risk (so that there is a world for her to live in!). I am not sure, however, how strong the reasons to do this would be. But views which imply that, if I don’t care about other people, I have no or very little reason to help them are not even minimally plausible views (in addition to hedonistic egoism, I here have in mind views that imply that one has no reason to perform an act unless one actually desires to do that act). To be minimally plausible, egoism will need to be paired with a more sophisticated account of well-being. To see this, it is enough to consider, as Plato did, the possibility of a ring of invisibility – suppose that, while wearing it, Ayn could derive some pleasure by helping the poor, but instead could derive just a bit more by severely harming them. Hedonistic egoism would absurdly imply she should do the latter. To avoid this implication, egoists would need to build something like the meaningfulness of a life into well-being, in some robust way, where this would to a significant extent be a function of other-regarding concerns (see chapter 12 of this classic intro to ethics). But once these elements are included, we can (roughly, as above) argue that this sort of egoism will imply strong reasons to reduce existential risk. Add to all of this Samuel Scheffler’s recent intriguing arguments (quick podcast version available here) that most of what makes our lives go well would be undermined if there were no future generations of intelligent persons. On his view, my life would contain vastly less well-being if (say) a year after my death the world came to an end. So obviously if Scheffler were right I’d have very strong reason to reduce existential risk. We should also take into account moral uncertainty. What is it reasonable for one to do, when one is uncertain not (only) about the empirical facts, but also about the moral facts? I’ve just argued that there’s agreement among minimally plausible ethical views that we have strong reason to reduce existential risk – not only consequentialists, but also deontologists, virtue ethicists, and sophisticated egoists should agree. But even those (hedonistic egoists) who disagree should have a significant level of confidence that they are mistaken, and that one of the above views is correct. Even if they were 90% sure that their view is the correct one (and 10% sure that one of these other ones is correct), they would have pretty strong reason, from the standpoint of moral uncertainty, to reduce existential risk. Perhaps most disturbingly still, even if we are only 1% sure that the well-being of possible future people matters, it is at least arguable that, from the standpoint of moral uncertainty, reducing existential risk is the most important thing in the world. Again, this is largely for the reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. (For more on this and other related issues, see this excellent dissertation). Of course, it is uncertain whether these untold trillions would, in general, have good lives. It’s possible they’ll be miserable. It is enough for my claim that there is moral agreement in the relevant sense if, at least given certain empirical claims about what future lives would most likely be like, all minimally plausible moral views would converge on the conclusion that we should try to save the world. While there are some non-crazy views that place significantly greater moral weight on avoiding suffering than on promoting happiness, for reasons others have offered (and for independent reasons I won’t get into here unless requested to), they nonetheless seem to be fairly implausible views. And even if things did not go well for our ancestors, I am optimistic that they will overall go fantastically well for our descendants, if we allow them to. I suspect that most of us alive today – at least those of us not suffering from extreme illness or poverty – have lives that are well worth living, and that things will continue to improve. Derek Parfit, whose work has emphasized future generations as well as agreement in ethics, described our situation clearly and accurately: “We live during the hinge of history. Given the scientific and technological discoveries of the last two centuries, the world has never changed as fast. We shall soon have even greater powers to transform, not only our surroundings, but ourselves and our successors. If we act wisely in the next few centuries, humanity will survive its most dangerous and decisive period. Our descendants could, if necessary, go elsewhere, spreading through this galaxy…. Our descendants might, I believe, make the further future very good. But that good future may also depend in part on us. If our selfish recklessness ends human history, we would be acting very wrongly.” (From chapter 36 of On What Matters)

#### 1---Trade-offs are inevitable even under their framework but it’s a question of calculating the harm of those tradeoffs---their framework justifies worse modes of policy obstruction and subjective value adjustments

#### 2---Independently creates terrible policymaking---policymakers make thousands of choices like this every year, and even if an existential risk is .001 percent, they’d trigger a nuclear war given literally three years which proves the “ignore 1 percent” framing is ethically bankrupt

#### Delgado has no warrant, assumes your revolution is valuable and reform isn’t possible during threats to bodily security which turns their arguments.

#### Ansell –their FW card-- sv doesn't cumulatively o/w because this is written in the context of the sum total of sv not sv against prison workers within the U.S.

#### Also means no UQ because it concedes that it is broadly ingrained in laws -- no spillup claim means they cant solve

#### Does not make an argument for why it cumulatively o/ws or why it would flip the DA's

#### Prefer util---even if its flawed,

#### 1---alternatives are worse because they justify the same ends but create decision paralysis, and requires saying some lives are more valuable than others, which turns all their impacts

#### 2---Tautological---devolves into consequentialism---either their maxims are created to minimize harm, which means they’re utilitarian consequentialist, or they’re inflexible in cases of moral atrocity worse than utilitarianism because they requires saving some people over others

#### 3---Not our util---utilitarian framework wouldn’t justify atrocities like slavery because the magnitude of the harm to a smaller group still outweighs

#### 4---Their 10 word highlighting the the ev only includes 1 argument about how institutions normalize structural violence with no warrant but insofar we prove that the structures pertaining to the aff are good or that util is a better alternative it has no implication

#### Check flow for UV 2

### Advantage

#### Worker strikes empirically fail in prisons and there’s a laundry list of tactics non-employers use within the system to prevent effectiveness without technically violating the right to strike – prisons don’t even have strike task forces because they don’t criminalize the actual striking

Washington 18 (Robin Washington – former interim commentary editor for The Marshall Project interviewing a prison warden, The Marshall Project, “A Former Warden’s View on Prison Strikes”, https://www.themarshallproject.org/2018/08/22/a-former-warden-s-view-on-prison-strikes, 22 August 2018, EmmieeM)

This week, a prison strike has been called for inmates at 17 facilities nationwide in response to an April riot at South Carolina’s Lee Correctional Institution, where seven inmates were killed while prison staff failed to immediately respond.

Among 10 demands stated by the [Incarcerated Workers Organizing Committee](https://incarceratedworkers.org/campaigns/prison-strike-2018), one of several groups endorsing the strike, are improvements in prison conditions, prevailing wages for incarcerated workers, voting rights for all confined citizens and an end to the racial overcharging, over-sentencing and parole denials to people of color. The strike is planned to continue until Sept. 9, the 47th anniversary of [the Attica prison uprising](https://www.themarshallproject.org/records/292-attica-correctional-facility).

For a view into the nature of prison strikes and how authorities respond to them, The Marshall Project spoke with Cameron Lindsay, a retired warden of three federal facilities: the Federal Correctional Institution in Lompoc, California, the U.S. Penitentiary in Canaan, Pennsylvania, and the Metropolitan Detention Center in Brooklyn, N.Y. Lindsay also ran privatized institutions in Philipsburg and Glen Mills, Pennsylvania, and has taught at several colleges. He now serves as a consultant and an expert witness in corrections cases. He spoke with Interim Commentary Editor Robin Washington. The views expressed are his own, and this interview has been edited for brevity and clarity.

Q: Have you experienced any strikes, hunger strikes, work strikes or other organized prisoner actions?

A: I’ve seen pretty much all of that over the course of 29 years. The most widespread strike that I ever saw that comes close to what I’m hearing about this week was in federal prisons in October of 1995. It was mostly African American inmates. They were protesting the vast disparity of sentencing laws between powder cocaine and crack cocaine.

It was the first and only time in history that (the federal prison system) announced a nationwide lockdown. The lockdown of a facility is something to be taken very, very seriously. It’s complicated and fraught with all kinds of problems. It’s not a decision to be made lightly.

I can promise you if these inmates do engage in some kind of systematic strikes that wardens will lock down the facilities.

Q: What have you experienced specifically?

In 1995, I worked at the Federal Correctional Institution, McKean, in Bradford, Pennsylvania. It started as a work strike. The first inmate called to duty is at 4 a.m. What we experienced on Oct. 24, 1995, was the inmate crew refused to go to work. There were some that wanted to but they didn’t because they feared retaliation. I have had others on a less severe scale. We had a very brief food strike at the (U.S. Penitentiary) in Lewisburg, Pennsylvania. It was small and isolated.

There are food strikes, work strikes, then all-out disturbances and/or riots, depending on the severity. You might have food service inmates who are upset about wages or the way they are being treated by staff. A work strike is the most common way — inappropriate, I might add — that inmates will demonstrate in an attempt to get the attention of the staff. Typically when it happens, the warden will lock down the facility until they have a chance to gauge what really is going on. They’ll gather intelligence, talk to informants, listen to telephone calls, until they can figure out what is going on out there. They may even reach out to certain inmate leaders. Usually, the next thing they do is remove the quote-unquote “agitators” from the general population and put them in isolation. Then they interview every single inmate so that nobody feels singled out.

Q: Does a strike ever work? From the inmate point of view?

In the short term, no. They don’t work because the ringleaders tend to get locked up, and after they are isolated they’re transferred to other facilities.

In the long term, they may be able to effect some change because they do get some media and political attention. In 1987 in Oakdale, Louisiana, and Atlanta, there were simultaneous riots. There was a specific cadre of Cuban inmates from the Mariel boatlift. Our government decided to repatriate them to Cuba. They did not want to go, so they raised hell in their facility. In the long term, their actions did lead to some changes.

Q: The cocaine sentencing disparities protested in the 1995 strike also were eventually changed.

There you go.

Q: Do prisons have a strike task force of some kind, with COs appointed to investigate?

That’s a tough answer. People talk about the “criminal justice system,” but it’s not one system, it’s a whole bunch of systems. There are local corrections, state corrections and federal corrections. There’s very rarely a coordinated effort on a widespread basis for a type of strike.

In the federal Bureau of Prisons, they are really good about gathering and cultivating intelligence. The staffers should be able to predict when one of these happens. Conversely, if you have a correctional facility that is not well operated and they don’t know that something is going to go down, when it does, they’re not going to know how to react.

### Solvency

#### T/l -- What part of this impact they resolve -- they haven't made a spillover claim or read any ev that the aff is sufficient to resolve recidivism etc.

#### Harvard Law Review -- Not sufficient to solve recidivism even if they get marginal increases in their pay that isn't sufficient to solve them being in massive amounts of debt out of prison

#### This ev doesnt say what they want it to -- it says peaceful strikes are good but they have no game on why the RTS would cause strikes to be peaceful -- takes out case b/c they would continue doing violent strikes

#### Their kelly ev is from 2018 and says that prison workers are already engaging in strikes which means the aff is nuq which postdates the Kozlowska evidence that claims there are barriers to strike

#### All of their solvency ev establishes that a right to strike is a nice first step but they have no evidence that says that it would actually increase their wages or reverse their arguments about how prisoners are left with massive debt

#### 2018 strike wave was largest ever in prison history – proves right to strike exists and strikes don’t solve

Lopez 18 (German Lopez – writing for Vox and has written for numerous other publications, “America’s Prisoners Are Going On Strike In At Least 17 States”, https://www.vox.com/2018/8/17/17664048/national-prison-strike-2018, 22 August 2018, EmmieeM)

America’s prisoners are going on strike.

The demonstrations are planned to take place from August 21 to September 9, which marks the anniversary of the bloody uprising at the Attica Correctional Facility in New York. During this time, inmates across the US plan to refuse to work and, in some cases, refuse to eat to draw attention to poor prison conditions and what many view as exploitative labor practices in American correctional facilities.

“Prisoners want to be valued as contributors to our society,” Amani Sawari, a spokesperson for the protests, told me. “Every single field and industry is affected on some level by prisons, from our license plates to the fast food that we eat to the stores that we shop at. So we really need to recognize how we are supporting the prison industrial complex through the dollars that we spend.”

Prison labor issues recently received attention in California, where inmates have been voluntarily recruited to fight the state’s record wildfires — for the paltry pay of just $1 an hour plus $2 per day. But the practice of using prison inmates for cheap or free labor is fairly widespread in the US, due to an exemption in the 13th Amendment, which abolished chattel slavery but allows involuntary servitude as part of a punishment for a crime.

For Sawari and the inmates participating in the protests, the sometimes forced labor and poor pay is effectively “modern slavery.” That, along with poor prison conditions that inmates blame for a deadly South Carolina prison riot earlier this year, have led to protests.

For prisons, though, fixing the problems raised by the demonstrations will require money — something that cash-strapped state governments may not be willing to put up. That raises real questions about whether the inmates’ demands can or will be heard.

The demonstrations come two years after what was then the largest prison strike in US history, with protests breaking out in at least 12 states in 2016. The new demonstrations could end up even larger than those previous protests.

Protests are planned in at least 17 states

There’s no hard estimate for how many inmates and prisons are taking part in the protests, as organizers continue to recruit more and more inmates and word of mouth spreads. But demonstrations are expected across at least 17 states.

The inmates will take part in work strikes, hunger strikes, and sit-ins. They are also calling for boycotts against agencies and companies that benefit from prisons and prison labor.

1. <http://dictionary.reference.com/browse/negate>, <http://www.merriam-webster.com/dictionary/negate>, <http://www.thefreedictionary.com/negate>, <http://www.vocabulary.com/dictionary/negate>, <http://www.oxforddictionaries.com/definition/english/negate> [↑](#footnote-ref-1)
2. *Dictionary.com – maintain as true, Merriam Webster – to say that something is true, Vocabulary.com – to affirm something is to confirm that it is true, Oxford dictionaries – accept the validity of, Thefreedictionary – assert to be true* [↑](#footnote-ref-2)