

**Bikini Atoll: Living with a Nuclear Legacy and
Mediating Conflict with the United States**

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Environmental Conflict Resolution

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Introduction

At the Northern edge of the Marshall Islands, located above the equator in the Pacific Ocean, Bikini Atoll composes a ring of islands that are no longer known to be safe for human habitation. After the native Bikini Islanders were relocated to surrounding islands beginning in 1946, the U.S. military used the atoll as a nuclear testing ground for twelve years. The resulting geographic destruction, radiation, and crowding of islanders has since plagued the people of Bikini and the hopes to return to their home islands have been marred by scientific uncertainty over the lasting impacts of

nuclear weapons testing. In their attempts to gain compensation for years of suffering, the Bikinians have filed numerous lawsuits, signed a significant and binding negotiation agreement in 1986, and have been awarded various trust funds to help remediate the land and aid in a potential resettlement process. Still, it is very questionable whether the reparations to date have and will be adequate to compensate both the Bikinians and the surrounding islanders who were grossly affected by over a decade of nuclear tests on and around the land of their people.

Geography

Bikini Atoll is a ring of 23 islands surrounding a lagoon in the Republic of the Marshall Islands, which is comprised of 357,000 square miles of area within the geographic region of Micronesia. It is one of 29 atolls, along with five individual islands, that make up the 1,100 small, flat Marshall Islands that are found thousands of miles from any major landmass (Woodard, 1998). The first Micronesian settlers are said to have arrived in the Marshalls anywhere from 2,500 to 4,000 years ago. Though the Marshall government describes them as “controversial,” archeological finds discovered in Bikini Atoll in the late 1980’s have been carbon dated to 4,000 years before present, suggesting settlement around this time (Embassy of the Republic of the Marshall Islands,

2005).

Because of their remote location, the Marshall Islands had no contact with the rest of the world until the 1600’s, when the Spanish and

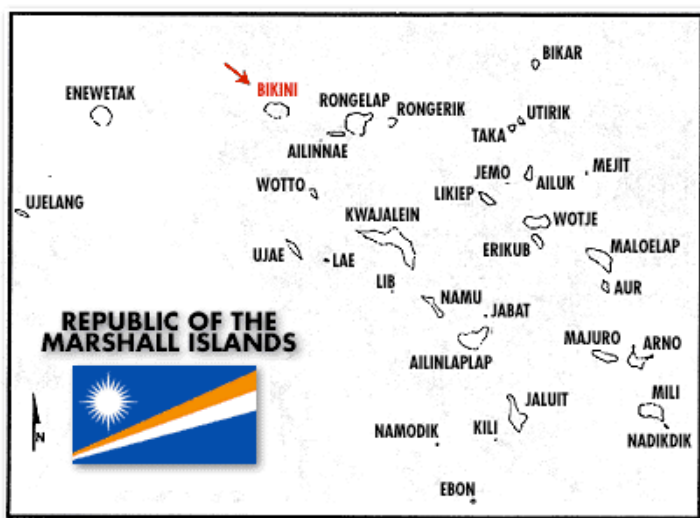


Figure 1 Map of Marshall Islands Courtesy of www.bikiniatoll.com

later the Germans began to exploit the fertile, southern Marshall Islands for the production of copra oil from coconuts. Meanwhile, Bikini Atoll, with a total land area of 3.4 square miles, remained unexplored due to its location in the dry, northern area of the Marshall Islands. Such isolation influenced strong family ties and tradition among Bikinians while also creating a belief that land ownership was an accurate measure of an individual's wealth and prosperity (Niedenthal, 2001, p. 1). In the words of Bikinian Jukwa Jakeo, "To all Marshallese, land is gold" (as cited in Niedenthal, 2001, p. 111).

Housing and Food

The Marshall Islanders, including the Bikinians, have long created their homes and other types of buildings using beam posts and thatched roofs. Materials used for the construction include wood from the mangroves, coral gravel for flooring, and thatching and mats made from coconut and pandanus (a tree- or shrub-like flowering plant) (Spennemann, D.H.R., 2000). For access to bountiful food sources, the Bikinians relied heavily on the protected lagoon within their atoll for harvesting fish, using spears, basket-like fishtraps, and fishnets as well as canoes for strategic positioning (Spennemann, D.H.R., 1998,). Other important food sources include coconut crabs, edible birds, and fruits such as the breadfruit, pandanus, and the essential, coconut (Spennemann, D.H.R., 2000).

Background: U.S. Presence

During the first half of the 20th century, Bikini Atoll and the rest of the Marshall Islands were part of the outer reaches of the Japanese empire and were thus used by Japanese troops during World War II (Deines, *et.al.*, 1990). The U.S. effectively removed the Japanese control in a bloody battle that captured Kwajalein Atoll, Southeast

of Bikini, in February of 1944 (Niedenthal, 2001). U.S. troops in turn assumed occupation of the Marshall Islands at this time. The war was effectively and shockingly ended just over a year later when the U.S. dropped two atomic bombs on Japan, killing more than 150,000 people and injuring at least 100,000 others (Chace, 1996).

Shortly thereafter, the U.S. Army and Navy, under the direction of President Harry S. Truman, launched plans to use the new strategic stronghold in the Marshall Islands as an opportunistic location to experiment with nuclear weapons. ‘Operation Crossroads’ was the first series within a decade of testing that was to be conducted within Bikini Atoll. Throughout the summer of 1946, two detonations would be executed to “study the effects of nuclear weapons on ships, equipment and material” (U.S. Department of the Navy, 2002, p.1).

Agreement and Relocation

Within the scheme to successfully carry out these nuclear weapons tests, Commodore Ben H. Wyatt, the American military governor of the Marshalls, travelled to Bikini Atoll for discussion with the Bikinians. He assembled the locals after church one Sunday and asked if they would agree to leave their island for a short time, allowing the United States to test atomic bombs “for the good of mankind and to end all world wars” (as cited in Niedenthal, 2001, p. 2). After deliberating over the upsetting and confusing idea among themselves, King Juda, the leader of the Bikinians at the time, stood up from the group and confirmed, “We will go believing that everything is in the hands of God” (as cited in Niedenthal, 2001, p.2). In March of 1946, the 167 local people traveled on a

U.S. landing craft from their home islands to Rongerik Atoll, 125 miles east. Emso Leviticus, now in her early seventies, recalls the big move in her early childhood; “We left our island after loading everything we owned including our canoes, various kinds of food, bibles, dishes, tools, and even some pieces of our church and Council house” (as cited in Niedenthal, 2001, p. 52).



Figure 2 *Children leaving Bikini, 1946*
 Courtesy of www.bikiniatoll.com

This relocation in and of itself caused many initial problems for the Bikinians. Rongerik was previously uninhabited because it was known to lack adequate food and water supplies. In addition,

it is about a sixth of the size of Bikini and was traditionally believed by the locals to be inhabited by evil spirits (Niedenthal, 2001). Furthermore, the lagoon within the 17 small islands of Rongerik Atoll only covered an area of 55 square miles, compared to the 299 square miles of Bikini’s lagoon (Micronesia Support Committee, 1981, p. 7). In her account of the move to Rongerik, Emso Leviticus continues, “...from the beginning, we had reason to lack confidence in our abilities to provide for our future on that tiny place” (as cited in Niedenthal, 2001, p. 53). Still, the Bikinians were cooperating under the assurance that their move would only be temporary, and thus the meager resources of Rongerik Atoll, which happens to be a relatively close atoll within the Marshalls, would suffice for the short time they would presumably be needed (Micronesia Support Committee, 1981).

Operation Crossroads

Just as the Bikinians were relocated to Rongerik Atoll, approximately “250 naval ships, 150 aircraft for observation and transport and thousands of military and scientific personnel” arrived at the atoll in preparation for and execution of Operation Crossroads (Micronesia Support Committee, 1981, p. 5). News reporters and cameramen as well as U.S. Congressmen and U.N. observers were all invited to witness the military experiment. On July 1, 1946 the first atomic bomb was unleashed on the Marshall Islands at Bikini Atoll, an airdrop code-named “Able.” The underwater blast, “Baker,” was detonated 24 days later. Each had the power of the bomb dropped on Hiroshima, or 21 tons of TNT (Davis, 2005). Five of the ninety-five target ships of the Able bomb sunk and those remaining were only minimally damaged. The underwater explosion, however, sent a one-mile-wide mushroom of water into the sky. As the water returned to the lagoon seconds later, it sent contaminated mist outward, dousing all but nine of the target ships and trapping more than “half the bomb’s fission products” in the lagoon’s water (Moore & Weisgall, 1994, p. 26). In terms of physical appearance, however, Bikini atoll seemed to remain intact. At the very end of July, King Juda returned to Bikini to inspect the results of the two tests, and reported back to his people that the island looked the same; it was unharmed and the trees were still standing (Niedenthal, 2001).

Test Shot Bravo

Though Bikini Atoll was subjected to twenty-three nuclear bomb tests between the start of Operation Crossroads in 1946 and the execution of Operation Hardtack I in 1958, the most disastrous explosion occurred on March 1, 1954. Bravo, a weapon with



Figure 3 *Bravo bomb crater. Photo © Matt Harris
Courtesy of www.bikiniatoll.com*

an “explosive yield equivalent to 15 megatons of TNT” or 1,000 times that of Hiroshima, scarred the atoll reef with a mile-wide crater. Moreover, three of the atoll’s islands were literally vaporized by the

nuclear explosion and radioactive fallout traveled at high speeds throughout Bikini Atoll and across the water to surrounding atolls (Davis, 2005, p. 216).

Initial Impacts

The initial impacts of the nuclear bombs, especially those felt and witnessed during and after Test Shot Bravo, were both intense and long lasting. For over 12 years the Bikinians lived far from their island, under the impression that they would one day return. Unfortunately the safety of their land would be questionable for many years to come. Upon the explosion of Bravo, the atoll suffered severe physical damage, including the 6,000-foot crater and the vaporization of three islands. While the Bikinians themselves happened to be relocated far enough to the east to be out of the reach of fallout, the native people of Rongelap Atoll, 100 miles east of Bikini, were neglected and severely affected on the day of March 1, 1954.

Despite an unanticipated shift in wind patterns toward the east before the Bravo explosion, the decision to proceed was still made. Residents of Rongelap actually witnessed the “second sunrise” that day. “It was a huge cloud with yellow and orange, mushroom-shaped, and the light was so strong it hurt my eyes’” (as cited in Woodard, p. 10). A little over an hour later, a gray ash soon fell on the Rongelapese who curiously played in it and wiped it across their skin (Woodard, 1998). Within a few hours the radioactive dust had formed a layer two inches deep and the drinking water turned a “brackish yellow” (Niedenthal, 2001, p. 8). Residents also began to suffer acute symptoms, including bleeding, vomiting, diarrhea and hair loss. After two days of confusion and panic, the Rongelapese were finally taken to the U.S. airbase at Kwajalein Atoll for medical treatment (Woodard, 1998).

Meanwhile, upon the Bravo explosion, radiation levels at Bikini increased dramatically and the “off-limit zones” were expanded to include Rongerik, Utirik, and Likiep atolls (Niedenthal, 2001, p. 8). Though all of these islanders were put in grave danger when they were left in the range of nuclear fallout, the U.S. did not hesitate with their nuclear agenda. Testing in Bikini Atoll continued until 1958.

Relocation Problems

In preparation for various tests throughout the islands, in addition to the emergency response evacuations, people of many different islands and atolls within the Marshalls were moved around for decades. Some groups were moved multiple times to

numerous locations.¹ The Bikinians perhaps suffered this legacy more than any other group of Marshallese. Their anxiety over the lack of resources at the first resettlement location (Rongerik, March 1946) was expressed within two months of being there and they had already begun to make requests to return home. Although the people of Rongelap tried to help their new neighbors by catching fish and transporting it to Rongerik, the food sources were still inadequate and the Bikinians were visibly suffering from malnutrition by July 1947. In August, a U.S. investigation into the issue found “insufficient food, a bankrupt store, low supplies of water and only one [brackish] well on the island” (Micronesia Support Committee, 1981, p.7). While the U.S. Navy planned to move them to Ujelang Atoll and even began to build a new village with the help of ten Bikinians, the Navy announced that, in preparation for a nuclear test at Enewetak Atoll, they would need to move the Enewetak people to Ujelang instead.

In the spring of 1948, after University of Hawaii anthropologist Leonard Mason described the condition of the Bikinians as “that of a starving people,” they were evacuated to a temporary camp at the Kwajalein airbase. The Bikinians were then moved to Kili Island, where food supplies remained a concern due to the lack of protected waters for efficient fishing. As resource problems worsened, part of the community was moved to nearby Jaluit Atoll, but a typhoon that destroyed most of the Jaluit crops forced them to return to Kili (Micronesia Support Committee, 1981).

¹ For a complete chronology of all Marshallese resettlements, see Micronesia Support Committee, *Marshall Islands A Chronology: 1944-1981*.

Health of Bikini Atoll

Beginning in the mid-1950's, various U.S. groups, including the University of Washington, surveyed Bikini Atoll and surrounding waters to determine radiation levels. In 1967, the U.S. Atomic Energy Commission held a meeting to address the possibility of returning the Bikinians to their island by using data collected by a University of Washington group three years earlier. After assessing the levels of Strontium 90 and Cesium 137 using "spot sampling of soil, ground waters, food such as coconuts and arrow root, fish, birds, and land animals," it was determined that, based on the radiation exposure levels of food sources, the southeast corner of the atoll held the most potential for relocation (United States Atomic Energy Commission, 1967, p. 3).

U.S. documents prove, however, that the understanding of acceptable radiation levels as well as the means to reduce the radioactivity of the Bikinian homeland was very minimal. Furthermore, it is apparent that the U.S. was willing to put the Bikinians at further risk by returning one group to Enyu (the Bikini island of least contamination) in order to rehabilitate other islands and make room for the remainder of the population (United States Atomic Energy Commission, 1967, p. 4). They also mentioned that spending more time fishing on the sea would help minimize the exposure to the higher levels of terrestrial radiation (United States Atomic Energy Commission, 1967). Over the next year, the Atomic Energy Commission surveyed Bikini and determined that with an "agricultural rehabilitation program," the coconut groves and subsistence crops, along with fish and seabirds, could support the return of the Bikinians. At the same time, they identified Cesium 137 Strontium 90 as the most questionable factors in the safety of Bikini Atoll (Hiyane, J.T., 1967).

In July of 1968, the Atomic Energy Commission declared that “the exposures to radiation that would result from the repatriation of the Bikini people do not offer a significant threat to their health and safety,” though they noted that consumption of coconut crabs had to be sharply reduced due to high Strontium content. In addition, the Commission suggested that topsoil should be removed before planting pandanus and food aid would also have to be implemented to assure proper nourishment and potentially reduce Strontium uptake by increasing calcium levels from powdered milk (United States Atomic Energy Commission, 1968, p. 4). Based on these conclusions, along with the support of President Lyndon B. Johnson, the Bikinians attempted their first resettlement in 1968.

Initial Restoration Attempt

For many years the Bikinians anxiously waited to return to their home as they heard pieces of information about the activities taking place on their islands and some of the effects these U.S. actions were having on their neighbors. When the United States claimed that Bikini was safe, many Bikinians were overcome with “thoughts of joy” and eagerly waited for the U.S. ships to pick them up and bring them home (Joel, qtd in Niedenthal, 2001, p. 106). While the Bikini Council did not decide to move the entire group back to Bikini, it allowed any families that wished to return to do so. The groups that returned became part of the restoration effort that the U.S. initially funded. Thus, in 1969 the U.S. Department of Defense, in conjunction with the returning Bikinians, began its five-year cleanup of Bikini Atoll with a \$2.7 million budget (Deines, 1990). The Bikinians were glad to be home and according to Pero Joel, a Bikinian elder who was involved in this return, they were quite content with the help and assurance of the United

States officials and scientists. Unfortunately, the scientific uncertainty revolving around the nuclear contamination and its spread through terrestrial materials and food sources soon became evident. The Bikinians were very confused and alarmed in response.

We were told at the beginning of our stay on Bikini that it was safe to eat anything we wanted, so we did....The scientists would explain a little about the radiation, but we were always under the impression that everything was safe....Then they started saying that they weren't sure and that we shouldn't be drinking as many coconuts or eating coconut crabs, nor anything else that lived off the land, because maybe there was more poison in the soil than they originally thought....These statements confused us (as cited in Niedenthal, 2001, p. 107).

This literal scientific experiment, accompanied by the U.S. tendencies to withhold information for long periods of time and not to communicate in a cooperative fashion would prove to be one of the most important aspects of the conflict surrounding fair reparations for testing on Bikini Atoll. Over the next 5 years, the Atomic Energy Commission only twice tested urine samples of the Bikinians who had decided to return home (Deines, 1990). By 1975, levels of Plutonium 39 and Plutonium 40 had increased 10-fold since the start of the resettlement and radiological tests discovered “higher levels of radioactivity than originally thought” (as cited in Neidenthal, 1990, p. 12). Unaware of the severity of the radiological dangers, the Bikinians remained on their islands. As they contemplated the new and terrifying surveys and reports, however, they began to demand complete, high technology studies as well as monetary compensation. Thus years of negotiations and agreements would result in an attempt to win just compensation for the harsh discomforts of relocation, the frightening health threats, and the destruction of such a culturally significant homeland.

Bikini Claims and Reparations for Damages

In October, 1975, the Bikinians filed lawsuit in the U.S. District Court in Hawaii and requested a complete radiological aerial survey of Bikini as well the discontinuation of the resettlement program until the U.S. complied fully with the National Environmental Policy Act and its environmental impact assessment processes (The People of Bikini, et al., 1975). Subsequent comprehensive studies yielded alarming results. Strontium 90 and Cesium 137 were found to be dominant in the terrestrial environment, and americium 241, plutonium 239, and plutonium 240 were also detected in the soil. By 1977, the level of Cesium 137 in the bodies of Bikinians had increased 10-fold from a 1974 study and was attributed to the consumption of contaminated food. Meanwhile, the Bikinians received a \$6 million trust fund from the U.S. government, placed in The Hawaiian Trust Fund for the People of Bikini. In September 1978, the alarming levels of Cesium 137 finally influenced the evacuation of all Bikinians from their home once again.² An additional \$3 million was later added to their trust fund.

In 1980, U.S. Act 96-205, the “Burton Bill,” gave the Secretary of the Interior the responsibility to provide medical care and treatment to the people of Bikini. This task involved “an integrated, comprehensive health care program including primary, secondary, and tertiary care with special emphasis upon the biological effects of ionizing radiation.” Also included in the statute was the requirement for a schedule of a “comprehensive survey and analysis of the radiological status of the atolls and the creation of an education program to help the islanders more fully understand nuclear

² Ironically, the full radiological survey requested in the 1975 lawsuit did not begin until after the Bikinians had left the atoll (Neidenthal, 2001) The suit was eventually dropped in 1978 on the condition that the U.S. complete a more comprehensive survey on Bikini as well as ten other atolls. Bikinians were also entitled to select one qualified scientist to work with the Department of Energy and provide an independent analysis of all collected data (Deines, 1990).

radiation and its effects” (United States Senate and House of Representatives, 1980).³

After the Bikinians once again filed lawsuit in 1981, this time in the U.S. Federal Claims Court, they were eventually awarded The Resettlement Trust Fund for the People of Bikini upon the dismissal of the case six years later. This fund awarded the Bikinians \$20 million with an additional \$90 million to provide for the cleanup of Bikini Island and Eneu Island within the atoll.⁴ These funds also pay for local government activities for Bikinians living on Kili and Marjuro, including support for Bikini Council employees, scholarships for students studying in the U.S., medical plans for the Bikinians, building of schools and homes, travel expenses, and attorney’s fees. (Niedenthal, 2001, p. 157).

Compact of Free Association

Despite U.S. attempts to appease them with promises of money and health programs, the Bikinians remained very discontent, as they were once again in exile from their atoll and reaching the 40-year-mark of their original dislocation. Many personal claims for damages and land loss still transpired. In 1982, the Government of the Marshall Islands signed the Compact of Free Association (COFA), a binding agreement with the United States that went into effect in 1986. This full and final settlement of all claims, past, present and future (related to the nuclear testing), provided for the establishment of the Nuclear Claims Tribunal (NCT) of the Republic of the Marshall Islands. An initial sum of \$150 was used to create a fund that was intended to generate \$270 million to be distributed by the NCT to the people of Bikini, Enewetak, Rongelap, Utrik over a 15 year period (Nuclear Claims Tribunal, 2004).

³ The Burton Bill also applied to the people of Enewetak, Rongelap, and Utrik Atolls, with all costs to be assumed by the Department of Energy (Deines, 1990)

⁴ Bikini and Eneu Islands had proven to be the least contaminated and most suitable for potential resettlement (Deines, 1990)

While the agreement established that military testing was officially terminated and that the Marshallese would be awarded a set amount of money, the Government of the Marshall Islands had effectively “sold out” their people by agreeing to end all current or future lawsuits (Davis, Burlington, VT, November 11, 2006). At the same time, much of the money that was granted was not actually transferred to the NCT. According to the Nuclear Claims Tribunal, “With only \$45.75 million made available for actual payment of awards made by the Tribunal during the first fifteen years of the Compact and less than \$6 million of the initial \$150 million now remaining in the Nuclear Claims Fund, it has become clear that the original terms of the settlement agreement are manifestly inadequate” (Nuclear Claims Tribunal, 2004). While large sums have been appropriated for payments to the Bikinians, the tribunal does not have enough money to pay for these claims. Furthermore, it has become clear that the costs of personal injury and property damage awards and adequate medical and educational programs was grossly underestimated and that more money is also required for environmental rehabilitation and surveillance of Bikini, Enewetak, and Rongelap atolls. The next step for the people of Bikini was “to petition the U.S. Congress for the money to fulfill this award” (Niedenthal, 2001, p. 158).

Thus, beginning in 2000, the Bikinians, along with other Marshall Islanders, embarked on an effort to receive the adequate monetary award through a *Changed Circumstances Petition* to the United States. They submitted this petition to Congress using the justification of “‘new and additional information” since the compact went into effect (as cited in Lum, *et. al*, 2005, p.4). This information includes “declassified Department of Energy records in the early 1990s that indicated a wider extent of radioactive fallout than previously known or disclosed and scientific findings that reduced the levels at which exposure to radiation was deemed safe” (Lum, *et.al*, 2005, p. 4).

The response to this petition has so far not been very promising. In November 2004, the U.S. Department of State, under the request of the U.S. Congress, released a

report that relies heavily on data collected from 1994 and uses it to cite several faults or weaknesses within the Bikinian claims while effectively maintaining that there is no legal basis for considering additional payments. The Congressional Research Service has since completed a comprehensive analysis of the petition claims as well as the 2004 U.S. report (Lum, *et.al*, 2005). In 2006, the Bikinians filed suit in the U.S. Federal Claims court to seek compensation under the Fifth Amendment to the U.S. Constitution, due to the failure of the U.S. to adequately fund the \$563,315,500 awarded to them by the Nuclear Claims Tribunal as of 2001. The most recent action on the matter was the U.S. motion to dismiss the case on September 15, 2006, on the premise that only Congress, not the Court, has jurisdiction to grant any remedy to the Marshall Islanders (Trauben, Keisler, Cohen, & Bleecker, 2006).

Negotiation Issues

The problems that the Bikinians now face in receiving fair compensation are clearly bound by legal and political constraints. Furthermore this is a case in which one side (the Bikinian effort) has considerable interest in gaining more benefits, namely hundreds of millions in monetary compensation, while the other side (the United States) has but one interest, that of defending the rules of COFA as interpreted by the U.S. and thereby defeating any obligation to grant more funding for NCT awards. Within these inter-governmental arguments and the Bikinian's refusal to accept the current legal and monetary circumstances lie two elements that are often a part of environmental disputes, science and psychology. Because of the lack of understanding about the extensiveness of the nuclear contamination in the islands, the probable environmental and health effects, and the ideal radiation level standard, there is serious contention about the prospect of the Bikinians ever returning to their atoll. Furthermore, the lack of communication and

cooperation between the U.S. and the Marshallese in addressing these issues has been a serious impediment to any resolution.

In his article, “‘Is It Really Safe? That’s What We Want to Know,’...” Dr. Sasha Davis addresses the combination of scientific and psychological issues involved in determining the safety of Bikini Atoll, which has serious implications on alleviating the current dispute. Davis explains that the perceived risk of a place is influenced by a combination of scientific proclamations, lived experience, and anecdotal evidence. Thus, while science may determine “potential hazards of a location,” such as radiation on and around Bikini Atoll, the results of such studies can be interpreted and applied in various ways, particularly in a cross-cultural setting such as this (Davis, 2005, p. 127).

Meanwhile, there is still a great deal of uncertainty surrounding just the scientific facts alone. The Marshallese have argued about the Cesium 137 standard used to describe safety for humans on the islands, which has historically been much higher than the accepted level used by the EPA and thus in most of the nuclear cases in the United States (Davis, 2005). Clearly, there is a diversion of opinions over the safety of the atoll, as many tourists (including Americans) see it fit for visiting and the workers that cater to this group also trust that it is safe for habitation. However, the majority of the current 3,000 Bikinians remain dispersed throughout the Marshall Islands with little hope of returning home. Hence the scientific uncertainty and clear double-standard of the United States has combined with the troubling Bikinian experience of resettlement and re-evacuation of the 1970’s to create a feeling in most Bikinians that the current state of the environment is unacceptable and more compensation is most definitely due.

Mediating Conflict

In devising an approach to negotiating the conflict between the Bikinians and the United States, the contentious issues of scientific uncertainty over nuclear radiation and the perceptions of risk must be seriously considered and most effectively minimized. Morris and Su write, "...a barrier to comprehending the facts of an environmental conflict is the tendency to resolve uncertainty or complexity in a way that supports one's prior beliefs" (Morris & Su, 1999, p. 1326). Such an approach has been used time and again by the United States. They have applied scientific findings from over a decade ago as well as radiation standards well below those of the U.S. in order to negate the Bikinian argument and avoid any additional costs.

At the same time, perhaps each side has employed "self-serving construals of the facts" in the on-going legal arbitration, leading to bitter arguments over the science involved and a failure to reach a true understanding about the interests of each side and the potential for a beneficial settlement (Morris, M & S. K. Su, 1999, p. 1327). The failure of communication has led to further problems in the applicability of scientific findings to the Bikinian lifestyle. Before the 1970's resettlement attempt, for example, the U.S. failed to recognize or consider that Eneu, the only island potentially "safe enough" for the group was not their main homeland and, moreover, living in dwellings on land which one has no claim is against the Bikinian tradition. In determining the safety of food, the U.S. also underestimated the Bikinian consumption of coconuts by a factor of ten.

Although the Bikinian argument is now tied up in court, there seems to be a significant role for an environmental mediator in coordinating the efforts to foster understanding between both parties about the science of radiation risks as well as the

lifestyle, traditions, and interests of the Bikinians as they remain in exile, dependent on imported food.⁵ Recognizing how the Marshallese have constructed their intense perception of risk after their people lived near nuclear testing for over a decade is key to understanding how they respond and why they expect the compensation that they do. Creating a two-way communication between scientists and the Bikinians can result in a more accurate estimation of the costs incurred and the tools for improving the situation for the Bikinians. This cooperation could also improve and advance the project of contaminated soil removal and Potassium treatments, currently the most favored approach to rehabilitating Bikini.

Davis further suggests that the resources for rebuilding should be accessible for the Bikinians to use independently, as many of the projects that have been promised by the U.S. have not actually materialized. Furthermore, an important task of such a mediator might be to improve the way in which Bikini is portrayed to the rest of the world (Davis, Burlington, VT, November 11, 2006). While this remains a difficult case involving very large monetary claims and a determined U.S. effort to avoid these payments, a mediator or an active liaison might help to more efficiently allocate any available resources and eventually improve the prospect of returning home to Bikini.

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⁵ Jack Niedenthal, an American who married into Bikini in the late 1980's, currently serves as a very important representative of the Bikinians to the rest of the world. As "Trust Liaison for the People of Bikini," he also maintains the informative website of the Bikinians; www.bikiniatoll.com

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