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1 for subsistence. That was the 2001 agreement which
2 we clarified just last month, we are entitled to
3 one or more studies to determine whether fish,
4 limu, shell fish and other marine resources near
5 Makua Beach and in the muluwai, on which area
6 residents rely for subsistence, are contaminated by
7 substances associated with the proposed training
8 activities at Makua military reservation. So we
9 have a court order, we're entitled to that
10 information.

11 So when you do a study based on very
12 limited sampling size such that the uncertainties
13 are so great that you cannot say anything
14 meaningful about the potential for contamination by
15 substances associated with proposed training at
16 Makua, you haven't done what the court order said,
17 you haven't done what you agreed to do, so money in
18 this case really is not relevant, what's relevant
19 is what the Army voluntarily entered into and what
20 the court ordered. That goes to a number of
21 different issues. The emphasis here is marine
22 resources, limu, shell fish, fish on which area
23 residents rely for subsistence. That goes to the
24 point that Vince Dodge raised, people fish at
25 night, people dive, people eat a variety of things

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1 out of the ocean, these are the things that the
2 Army agreed to and is obliged to study, and that's
3 not what we got.

4 One thing, you know, and I haven't had an
5 opportunity, these reports came out a couple weeks
6 ago, even our experts that we've retained to take a
7 look at them have only been able to get back on
8 such short notice with impressions, and we'll be
9 offering more detailed comments over the course of
10 the public comment period which I must emphasize
11 again should be extended to allow 60 days from the
12 availability of all of the data on which the
13 studies were based, but I'll give you some of the
14 things that we have noticed so far.

15 How many people here in the room ever eat
16 fish for dinner? When you eat fish, do you eat an
17 ounce size portion of fish or do you eat more than
18 that, and my guess is that the answer is going to
19 be more than that because an ounce is not very
20 much. Well, the study assumed that for
21 recreational fishermen, so people that are not
22 subsistence, that a meal of fish is 34 grams, 28
23 grams is an ounce, so we're talking a little bit
24 more than a couple of bites, that was the,
25 obviously, how much of something you eat has a

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1 strong correlation to the likelihood you're going
2 to get poisoned by it or it's going to contribute
3 to cancer rates, so if you start with an
4 unrealistically low assumption that people take a
5 bite of fish and that's their fish meal and that's
6 what you're going to evaluate, you're going to get
7 inaccurate results that are not reliable because
8 the point of the exercise really is not to, we
9 didn't enter into this to try and prove that marine
10 resources at Makua are unhealthy, because that
11 would really be damaging to this community if that
12 were the truth, we'd like to have good data that
13 proved that marine resources at Makua are healthy
14 because the fact of the matter is, that healthy or
15 unhealthy, people are going to be keep eating them.

16 The reason we entered into the agreement
17 with the Army, the reason we insisted on this
18 particular type of study is because we know the
19 people in Waianae rely on their resources for the
20 livelihood, for their subsistence, for their
21 recreation, for their paina, and we want them to
22 have good information about the likelihood that
23 these are killing them, that's why we need good
24 information and that's why we entered into the
25 agreement. So if a good study is done and the

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1 study reveals there's nothing to worry about, you
2 can eat the limu, you can eat the fish, you can eat
3 the shell fish, that's good for everyone, that's
4 fine, that's it, that's a fine result because I
5 think that there are some out there who assume that
6 what the community is trying to do and the groups
7 that Earth Justice represent are to say "Gotcha" to
8 the Army, to prove that something is harmful, and
9 that's not accurate, particularly in this case, all
10 we want is good information.

11 So when you do a study that assumes that
12 we only eat an ounce of fish at a meal, that
13 doesn't give us good information. When you do risk
14 assumptions, it may get you a good sound bite in
15 the media that your odds of getting cancer are less
16 than your odds of being hit by lightning -- I might
17 state for the record I've been hit by lightening,
18 so it happens, it's true, in Wisconsin, anyhow, but
19 it gives you a good sound bite, it doesn't give you
20 good information, because if you're actually going
21 to eat more than an ounce you're going to get a lot
22 more toxic loading.

23 Now, for a subsistence fisherman, now
24 this is someone who is relying on this area to
25 really survive, I mean, they're not going to the

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1 supermarket for their fish, this is survival, they
2 consume 110 grams, so that's about a four ounce
3 portion, it's a quarter pound of meat, so those who
4 go get a quarter pounder, not very much, again. So
5 in terms of what the experts who do this over at
6 EPA, EPA assumes that an average fish sized meal is
7 227 grams, so over twice as much they consume for
8 subsistence fishermen or about half a pound, and
9 based on my own experience and 41 years on this
10 earth, that's kind of more like what people tend to
11 eat when they sit down to eat fish, so we need
12 studies that are based on good data, and we're
13 entitled to them.

14 One of the big issues that's totally
15 unresolved in this study is the likelihood that
16 people are eating toxic levels of arsenic. They
17 came out in the study with extremely high levels of
18 arsenic in the fish and the limu, the problem is
19 they don't tell us whether the arsenic is organic
20 arsenic, which has a lower toxicity, or inorganic
21 arsenic, which has a very high toxicity, there's no
22 reason for that. You can analyze a sample and
23 determine the proportion that's organic and
24 inorganic.

25 Now, I talked to the folks who are

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1 putting together the study, and I mean them no
2 personal disrespect, I'm sure they were following a
3 plan that the Army approved and told them to carry
4 out, they didn't analyze whether the arsenic was
5 organic or inorganic, they looked at studies that
6 said worldwide, most fish has organic arsenic in
7 it, therefore, we assume that all of the arsenic
8 that we found is organic. Well, that doesn't
9 follow logically because most fish aren't in a near
10 shore area where we have surface water studies that
11 the Army has done that inorganic arsenic is flowing
12 in the streams into the water, so you can't just
13 sort of assume, you know, sort of Socrates was a
14 man, that type of logic. Unless you study the
15 specific fish that people are going down and eating
16 to determine whether it's organic arsenic or
17 inorganic arsenic, you're not going to get good
18 data. Same thing with limu, limu had very high
19 levels of arsenic, they did not go into any
20 analysis of whether it was organic or inorganic,
21 that's information that we need, that's information
22 that we're entitled to. Also, with limu, I'll get
23 into a little bit later the references that were
24 used for these various studies, but for limu they
25 did not sample limu anywhere else in the Hawaiian

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1 islands, in fact, anywhere else at all, they just
2 looked at the chemical constituents that are in
3 this limu that people are eating, people are
4 gathering, people are eating, I've eaten it,
5 there's no comparison, so we don't know what
6 pristine limu would have, maybe it is that all limu
7 in Hawaiian waters have elevated levels of arsenic,
8 and even if you go to pristine areas on neighbor
9 islands that are not affected not only by military
10 activities, and I'll get into this, but by any
11 urbanization or human input, any anthropogenic
12 input, maybe that's just the way our limu is, well,
13 that would be a meaningful study, that would
14 provide meaningful information, that this is the
15 level arsenic that you get in limu. Sampling is
16 one place not breaking that organic/inorganic and
17 not having any baseline, any comparison doesn't
18 provide information we're entitled to.

19 I'm going to highlight one of the parts
20 of the marine study that is completely missing,
21 and, again, I'm quoting from an agreement that was
22 entered by the court on January 8th of this year:
23 Defendant shall complete one or more studies to
24 determine whether shell fish near Makua Beach and
25 in the muluwai on which area residents for life for

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1 subsistence are contaminated. Shell fish. There's
2 nothing in this study about shell fish, they didn't
3 gather shell fish, whether it's crabs in the
4 muluwai or urchin in the inshore areas, there's no
5 study of shell fish at all, none. So they have
6 failed to comply with their agreement and the court
7 order to study shell fish, they need to do that,
8 they need to do that, they need to take these
9 comments, they need to revise the study and also
10 under the agreement we reached last month they need
11 to go out and do another 60 day public comment
12 period because it's not, you know, don't blame
13 Earth Justice, don't blame Malama Makua, you
14 entered into the agreement, you agreed to do
15 certain things, and when we get the study they're
16 not there, so if you want to know who's dragging
17 this process out, you have to look in the mirror
18 because it's the decisions that the Army's making
19 not to fulfill the black and white terms of the
20 agreement.
21 I'm not singling out any individual, I'm
22 just saying the reality is that we will insist on
23 complete compliance with these study requirements
24 because we want good information and we're entitled
25 to that information because that's the agreement

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1 that we have. So I think everyone on both sides of
2 this issue hopefully can agree that when two
3 parties who may disagree about something have
4 nonetheless entered into an agreement, they're
5 entitled to be held to that agreement, and there's
6 nothing improper about doing that, and we will.

7 In terms of the sampling, the so-called
8 background areas of the reference sites, let's talk
9 about Nanakuli muluwai. Nanakuli muluwai has the
10 past and present military impacts, but in addition
11 it's in an urbanized portion of the Waianae Coast,
12 it's in the middle of Nanakuli, it gets all of the
13 contaminates that flows whenever people drive
14 through on the Farrington Highway or repair their
15 car or throw their garbage or all those things
16 affect that muluwai, so when the Army tells us that
17 with respect to certain contaminants the levels at
18 Makua which, other than the Army's activities, is
19 in a remote and formerly pristine portion of the
20 island are similar to the level of contaminates at
21 Nanakuli and, therefore, there is no impact from
22 the military, that's just wrong, it's like saying
23 we've sampled the ash residue left at H power and
24 it has greater levels of arsenic and heavy metals
25 than the fish and limu in the muluwai, and,

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1 therefore, the military's doing no more than
2 society as a whole is doing. You need to look at a
3 non-contaminated muluwai, which is what Makua would
4 be, and determine what the background levels are.

5 Let's go another step further. When
6 you're looking at an Environmental Impact
7 Statement, the Army has an obligation to talk about
8 cumulative impacts, so the only thing this study
9 wants to talk about is the incremental impact of
10 what the Army is adding to what you would otherwise
11 find in terms of contamination near fish. Let's
12 take it as a given, this is an assumption, that
13 even if the Army had never trained at Makua, there
14 would be a certain level of contamination in the
15 fish and the limu. They didn't say, well, the only
16 thing that we're concerned about is the extent to
17 which we add to it incrementally. Well, under the
18 law that's not accurate, you need to disclose in
19 your Environmental Impact Statement the cumulative
20 impact, which is the impact of the Army's
21 activities on top of the impact of everyone else's
22 activities, including nature, I mean, just what the
23 cumulative impact is, because with respect to a lot
24 of contaminants, a lot of poisons, you get to a
25 point where it's the straw that broke the camel's

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1 back, it would be okay if you had this level of
2 contamination, but when you add this level of
3 contamination, all of a sudden you've gotten to a
4 heightened risk that goes beyond what society will
5 accept, so you need to evaluate, you need to
6 analyze not the incremental damage, but in addition
7 you need to look at the cumulative effects. So
8 even if in pristine areas you have certain levels
9 of contamination because of global pollution,
10 there's just no way to run because we've
11 contaminated our environment or naturally occurring
12 pollution like, you know, vog coming out of the
13 volcano, if you're adding on top of that, you need
14 to analyze that, we're entitled to that
15 information.

16 Sandy Beach, there's been questions
17 raised whether that's an appropriate background for
18 the fish and so, in general, you need to address
19 how you selected the locations because if they're
20 not free of human input, if they're not pristine
21 areas, they don't tell us what the effects are of
22 the military being there.

23 Turning now to the archeological studies,
24 and if there are other people that want -- I mean,
25 I don't need to monopolize, does anyone else want

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1 to jump in or I should go ahead and finish?
2 On the archeological studies we also have
3 agreements on what needs to be done. Starting in
4 2001, we have an agreement that was substantially
5 modified in 2007 so we'll just focus on the January
6 8th agreement. With respect to archeology, the
7 defendants, in this case the Army, were supposed to
8 complete, complete surface and subsurface
9 archeological surveys of all areas within the
10 company combined arms assault course. For those of
11 you who are familiar with Makua, that's the south
12 fire break road, except for the area that is
13 suspected of having or that has been designated as
14 an improved conventional munitions area, and with
15 respect to that area the Army was supposed to
16 secure a waiver, or if the Department of the Army
17 would not give a waiver after good faith efforts by
18 the 25th Infantry then they would not have to
19 conduct the archeological surveys in those areas.
20 Today I tried to determine, because no surveys were
21 done within the ICM area, whether the waiver had,
22 in fact, been granted, denied, still pending, we
23 don't yet have information on that, we need that
24 information because under the agreement we're
25 supposed to be commenting after all archeological

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The Army did ask for an ICM waiver, but it was denied. The Army has provided correspondence reflecting this denial to Earthjustice.

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1 studies are completed. So, presumably, we're going
 2 to find out what the status of the waiver is. If
 3 the waiver is still pending, this process is
 4 premature.

5 The requirement is to complete surface
 6 and subsurface archeological studies. When I spoke
 7 with Laurie Lucking at deposition in, I believe,
 8 November of 2005, we agreed that there was an area
 9 within the south fire break road where, outside of
 10 the ICM area but inside the fire break road that
 11 had not yet been surface surveyed, that would be
 12 the southeast lobe, it had not yet been surveyed at
 13 that point, it needed to be surveyed, I haven't
 14 seen anything in this study to suggest that those
 15 surface surveys have been completed. If they have
 16 been completed, great, but we are supposed to have
 17 those disclosed to us so that we can also comment
 18 on those.

19 With respect to the subsurface
 20 archeological surveys, there are some serious
 21 problems, and all these comments are preliminary
 22 because of the short time for review, but, again,
 23 the emphasis was on complete surveys so that we
 24 would have all the information that we need in
 25 order to evaluate the impact, the effects of live

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 All areas within the south firebreak road have been surface surveyed for archeological resources, including the southeast lobe.