



Journey to Planet Earth

Transcript for Episode 07: Future Conditional

Complete Version

Journey to Planet Earth is produced by

**Screenscope, Inc.
4330 Yuma St, NW
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(Opening Montage)

Next on “Journey to Planet Earth.” Coping in a world of toxic pollution. The Arctic, a once pristine wilderness under siege. Mexico, living in the shadow of tariff-free factories. Uzbekistan, caught between its silk road heritage and the realities of the 21st century. And the United States, a Latino neighborhood celebrates an environmental victory -- while a sanctuary for biodiversity becomes a graveyard for millions of birds. Please join us as Journey to Planet Earth investigates the global link between the release of toxic pollutants and the health of our planet.

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(Arctic Montage)

We begin our journey here, in an isolated and vulnerable world of extremes. In many ways, this is the perfect place to investigate the future health of our planet, a future conditional on how we cope with the spread of toxic pollution.

The arctic is a place dominated by the rhythms of nature and the seasonal patterns of migration. It's a place of deep fiords teeming with life and remote fishing villages governed by the endless cycle of strong tidal currents.

(Inuit Town)

Iqaluit is a remote village in Northeastern Canada, about 90 miles south of the Arctic Circle. Most of the 5,000 people who live here are Inuit, a nomadic people that migrated across a land bridge from Asia more than four thousand years ago. Though this is a community that has clearly entered the 21st century rush hour traffic has never really been an issue. In fact Iqaluit has less than ten miles of roads.

(Tundra)

The only way in or out of town is by plane or boat. Iqaluit is surrounded by a long arm of the North Atlantic and treeless green carpets of tundra covered with the delicate flowers of summer. However, the image that most people have of the polar region, of a pristine unspoiled wilderness, is far from accurate. The Arctic, which has very few sources of industrial pollution, is turning into a toxic sink.

(Research Laboratory)

Five hundred miles south of Iqaluit is a small settlement of only 600 people. Yet, it's the home of the region's first trace metal analytical laboratory. This is where biologists, using highly sophisticated instruments, study nearly 1,000 animal specimens each year. Incredibly, they show rising levels of the world's most hazardous chemicals: DDT, PCBs, dioxins, and mercury. Michael Kwan is the lab's chief toxicologist.

Michael Kwan

The mercury levels in the arctic, and the environment in general, is increasing and so it is very important for us to closely monitor anything that people eat. Fish, marine mammals, caribou, anything that's consumed by the local Inuits.

But where do these chemicals come from and how did they get here?

(Time Lapse of Clouds)

In a phenomenon scientists call the grasshopper effect, toxic pollutants released thousands of miles to the south evaporate in the warm climate then ride the winds until they reach the cold air of the Arctic where they eventually fall to the earth.

(Caribou)

It doesn't take long for the Caribou to feed upon the tainted moss and shrubs of the tundra.

(Seals and Polar Bear)

And in the sea, fish feed upon toxic plankton, which are then eaten by seals and polar bears.

Devra Davis

University of Pittsburgh Cancer Center

Polar bears are showing up with levels in their fat of certain toxic pollutants that would qualify them for burial in a hazardous waste site. Now, those polar bears don't work in factories, but what they do is they're at the top of the food chain -- full of a lot of hazardous material. This is clearly a cause for concern.

Polar bears are not the only ones at the top of the food chain.

(Seal Hunt)

Barney Kovic and his 13-year-old nephew Virgil are hunting seal. They will be on the water for about twelve hours. The sea ice is not completely broken up so the boat must maneuver slowly through dangerous waters. Barney and Virgil are searching for ringed seals, one of the most abundant sea mammals in the polar region. Here in the arctic, hunting is far more than a sport, it's a necessity because the meat provides as much as 65 percent of the protein in the Inuit diet and most families simply can't afford the high cost of store bought food.

Sheila Watt-Cloutier

Inuit Circumpolar Conference

Seal hunting is absolutely important in order to nourish us and to give us the food that we require. But the process of the hunt is very powerful and that is something that most people have not come to understand. The hunt itself and the process of it teaches us such wisdom to be able to go out there and build character for our children. We have done so for millennia.

(Archival Hunting Footage)

It was only fifty years ago that the Inuit followed a more nomadic existence. Life was never easy for those who braved the harsh polar climate. The Inuits never ending pursuit of food was a matter of survival. For thousands of years, the sea was the Inuit's greatest source of sustenance, and Seal hunting was an essential part of their culture. The hunt was also a learning experience, a skill handed down from generation to generation.

(Seal Hunt)

Barney and Virgil have been out for almost seven hours. They finally spot a ringed seal. The first shot misses. The seal dives but Barney knows it can only stay underwater for a few minutes before coming up for air. He now has to anticipate where the seal will rise and hope that it's within range. When the seal appears Barney signals for the boat to maneuver closer. His patience is finally rewarded.

(Skinning Seal)

This one seal will feed Barney's extended family for a week. But recent studies show that Inuits have some of the world's highest levels of toxic chemicals in their bodies.

Sheila Watt-Cloutier

It was really shocking when the science started to come in -- the food that has nourished us for millennia, spiritually, emotionally and physically were now poisoning us and it was not of our doing.

The discovery of toxic pollutants in the food supply has put 155,000 Inuits on the brink of a public health disaster.

Devra Davis

The women who eat these animals themselves, then, are absorbing these industrial pollutants that were originally used in the United States, Mexico, Central America, and China and as they travel into the bodies of these women, they're deposited in fat, and when they have babies, the fat releases right into the breast milk. The Inuit women have no choice. They have to feed their babies. They don't have access to formula. And as a result the breast milk that they are giving their babies, a source of life and sustenance, is contaminated with some of the worse pollution we have ever see on this planet.

Sheila Watt-Cloutier

I think the world has to care about what's happening up here in the Arctic because we have become the early warning system. Whatever happens to the planet happens first here in the Arctic and I think that's what the world has to understand.

(Inuit Campsite)

For now, the Inuit who have contributed almost nothing to the contamination of their land remain unintentional victims. Their only hope is that communities to the south find ways to halt the spread of toxic pollution. As we will learn, that's not an easy task.

(Tijuana Cemetery)

Four thousand miles from the Arctic, November Second is known as the Day of the Dead. This is Mexico's most important and festive holiday. Here in Tijuana, families are joining together at the graves of their closest relatives to honor and celebrate their memories. It is believed that the souls of children will be the first to be saved. Food and gifts appropriate for their age decorate their gravesites. Unfortunately, there are too many graves of young people in Tijuana.

(Industrial Zone)

Not far from the center of town, along the border with the United States, is a tariff-free industrial trade zone.

Consuelo Garcia
Environmental Health Coalition

As a result of the border industrialization program that the U.S. and Mexico signed, as well as the North American Free Trade Agreement, we have here over 300 maquiladoras -- foreign-owned companies that operate in this industrial park behind me.

Thanks to NAFTA, these factories provide nearly 140,000 jobs for the people of Tijuana. But at what cost?

Consuelo Garcia

This site is Metales y Derivados, a highly toxic site abandoned by a U.S. company. And the people who live around here, in this valley below, they live with the constant exposure to the toxics that come out of this maquiladora.

(Battery Recycling Plant)

In 1994, the Mexican government cited this American owned battery recycling plant for failing to dispose of hazardous waste. In response, the owner abandoned the location. When threatened with arrest unless he cleaned up the site he fled across the border to San Diego. Left behind were over 46 million pounds of toxic waste baking in the sun. It's been poisoning the soil and the air for more than a decade.

(Shanty Town)

In a valley just below the industrial park is Colonia Chilpancingo, a community of about 10,000. When it rains a nearby creek is flooded with chemical wastes from the industrial park. They include lead oxides, sulfites, heavy metals, sulfuric acid, and arsenic. As this highly contaminated waterway weaves its way through the shantytown community it poisons everything and everyone in its path including the community's only source of water.

Consuelo Garcia

The health problems that people suffer from, many of them are related to contaminants in the water. We know they don't drink but they can't help using it to wash their clothes, to wash their dishes, so eventually some of it does get into their system. Kids who bathe in this water suffer from skin rashes and constant stomach problems.

Over ninety percent of the children of Colonia Chilpancingo tested positive for elevated levels of lead in their blood --- an abnormally high number suffer from birth defects. For years, the community petitioned the Mexican government to clean up the site. Their pleas were always turned down, the six million dollars needed to stop the pollution was never made available. And the children, whose toxic playgrounds are less than a mile from the United States, are the innocent victims of a trade agreement that has no provision to force compliance with environmental laws. Even worse, the parents of these children have few choices other than to labor in the same factories that are poisoning their kids.

(Workers Heading Home)

At the end of the day, thousands of workers head home. Though their jobs pay about fifteen dollars for a ten-hour day they still cling to the dream of living in a healthier and better place. It's an optimism sparked by the recent success of a Latino community located just 17 miles away in one of California's largest and most affluent cities.

(San Diego Skyline)

San Diego has always been known for its scenic waterfront. Its nearly perfect climate also makes it a popular sailing and tourist destination. But what tourists never see is a small neighborhood hidden away between the Coronado Bridge and a large waterfront industrial complex.

(Barrio Logan)

Barrio Logan is three miles long and just six blocks wide. This is one of San Diego's poorest Mexican-American communities and its residents have long been the targets of environmental discrimination. Forty years ago, the city of San Diego tried to force people out of Barrio Logan to make room for commercial development. Zoning laws were changed overnight. Small factories, junkyards, and auto-wreckers were encouraged to move into the residential neighborhood. The community was outraged.

Man

The pounding -- everyday -- my house is slowly cracking -- the walls in our house -- the paint peeling -- falling off. This used to be a very nice area -- at one time until somehow, somebody said it would be a nice place to make junkyards.

Woman

Junkyards -- industry -- everything started happening. My community started falling apart.

(Children Playing)

But most families were strongly attached to their neighborhood and refused to move. It didn't take long for city planners to try another tactic.

(Bridge and Freeways)

They cut off Barrio Logan from the rest of San Diego by making it the site of an expanded highway system and a new bridge. Once again, the neighborhood was under attack, this time by enormous amounts of auto emissions. Salvador Torres, a local artist, remembers the community's frustration.

Salvador Torres

Here we are. We're faced with pollution of our community. The freeway's coming through, the bridge. Suddenly industry starts developing here, and with this comes the idea of our community being assaulted with toxins.

(Demonstration)

Unable to stop the construction, anger surfaced. And when the city reneged on its promise to build a park under the bridge the people of Barrio Logan demonstrated. They formed a human chain around the site and refused to leave until the city gave them their park.

Woman

It was the first time that we had all come together in a sense of unity for ourselves and our community. Other than that, it had been very isolated. we believed it -- we said it -- we taught our children -- but we didn't vocally come out.

Man

I think that we the first time in my life I saw some people that were very -- you can see it in them - - dedicated, committed, believing in something.

After a two-week standoff, the demonstrators won their recreational area which they proudly called Chicano Park. Today the pylons that support the bridge are covered with murals that celebrate Barrio Logan's Latino culture.

Salvador Torres

Chicano Park, to me, represents the struggle of our community. This idea was to develop monumental murals that would represent our history, that would represent the feelings that we have growing up in this community -- our successes and our failures, our victories.

(Heavy Traffic and Industry)

Though Barrio Logan won its battle for Chicano Park it still struggles in its fight for clean air. Each day hundreds of diesel trucks, nearly 300,000 cars and dozens of factories operate in and around this residential neighborhood.

Paula Forbis

Environmental Health Coalition

The studies have been done across the country showing that people of color and low-income communities are much more subject to being the targets of industrial sources moving into those neighborhoods than into other neighborhoods. This has resulted in a variety of health impacts -- 20 percent of the children in Barrio Logan have either asthma or probable asthma.

(Master Plating)

The failing health of the children sparked a new community protest. This time they went after Master Plating, a factory located in the residential heart of Barrio Logan that used hexavalent chromium, a known cancer-causing chemical.

(Montage of News Reports)

Now! This is 10 News Nightcast.

Local television stations documented the community's fight.

Dangerous toxins are raising the risk of cancer for people who live in Barrio Logan

You cannot see it, you can't smell it, but it can kill you. It's called Hexavalent Chromium.

The family that lives next door to Master Plating here on the twenty-one hundred block of Newton Avenue has a son who is forced to use an inhaler several times a day to alleviate severe breathing problems.

Common sense tells us that a plating shop does not belong next to a home or a school.

What we're trying to do now is to take the proper enforcement actions against the violation, which in this case is Master Plating.

The company blamed for causing the pollution is being shut down.

Master Plating is killing us. The refrain for a decade by residents of Barrio Logan.

I'm happy for my family, but mainly my community.

Because finally, after hundreds of meetings, scores of studies, dozens of protests, Master Plating is being shut down.

This is what good politics is, you know, community and our representatives, everybody. This is what it means to finally get something done, working together.

(Celebration)

A few days after Master Plating closed down the people of Barrio Logan gathered to celebrate the shutting down of a factory that had been poisoning their community for decades.

Paula Forbis

The celebration is to mark the closing of Master Plating and the reduction in toxic emissions from that facility. We're happy to report that there will be a 75 percent decrease in chrome levels at the houses around Master Plating and that results in a much less of a cancer risk to residents in this immediate area.

For the people of Barrio Logan this victory is one more milestone in their struggle for environmental justice, their struggle against discriminatory zoning regulations, and their struggle to create Chicano Park. Barrio Logan's achievements may also serve as a wake-up call for a desert resort community located less than 150 miles away.

(Palm Springs)

On most Thursday afternoons, thousands crowd the streets of Palm Springs' weekly outdoor market. It's hard to believe that this city of 40,000 has anything in common with the Latino communities along the border or the Inuit villages in the Arctic. This is a place where children do not suffer from the effects of industrial pollution or a contaminated food chain. Yet within a few years, Palm Springs may be at the center of a serious public health emergency.

(Desert and Salton Sea)

Forty miles to the south and rising out of a harsh brown landscape is a vast body of water called the Salton Sea. It seems almost too good to be true, an inland lake in the middle of the desert. This is California's crown jewel of biodiversity, a sanctuary for millions of migrating waterfowl.

Tom Kirk
Salton Sea Authority

The Salton Sea is host to more species of birds than any other place, save perhaps, for the Gulf Coast of Texas. Half of all bird species found in the United States can be found at the Salton Sea, so it's this massive truck stop, we like to say, a key location for birds to stop, eat, rest along their trip either north and south along this Pacific flyway.

(Salt Flats)

But as recently as 100 years ago, there was no water here. It was a huge dried out salt basin, the remains of ancient lakes that over time, evaporated into the desert air. But in 1905, everything changed.

(Flood)

That's when violent winter storms caused the Colorado River to go on a rampage. In the Spring, the swollen river suddenly jumped its banks. The entire flow of the Colorado surged into the Salton Basin. Farmland and homes were washed away. For 18 months, engineers waged a fierce battle. When the river returned to its original course what was left behind was the Salton Sea.

(Salton Sea)

Today, this is the largest inland body of water in California. For four months temperatures soar above 100 degrees. Over six feet of water is lost to evaporation every year. But unlike the lakes of ancient times, it hasn't dried up.

Tom Kirk

This Salton Sea is very different than those previous Salton Seas. It's not this great lake that becomes massive and dries up, and massive and dries up. It's a lake that's largely sustained by man's activities, particularly agriculture.

(Agriculture)

Five hundred thousand acres of rich farmland carpet the neighboring Imperial and Coachella Valleys. Once a desert wasteland, today these farms provide nearly eighty-five percent of the nation's winter vegetable crop. What makes this billion-dollar industry possible is Colorado River water, enough water to satisfy the yearly needs of a city of 24 million. But intensive irrigation also produces massive amounts of run-off.

Larry Cox

Imperial Valley Farmer

The drain water that comes off of our fields and the fields in Coachella flow naturally into the Salton Sea and there's pretty close to a million acre feet of water that runs into the Salton Sea every year. There's no flow out of it so anything that flows into there stays there.

(Visualization)

An enhanced satellite photograph shows a landlocked Salton Sea. Surrounded by mountains and desert, the green areas to the north and south are irrigated agricultural development. These farms are the source of drain water that keeps the sea from drying up. But it's a resource that presents a major paradox.

(Waste Water)

What feeds the Salton Sea is slowly killing it. The agricultural drain water contains enormous amounts of salt and chemicals. Over the years, it has become twenty-five percent saltier than the ocean. Several decades ago, the sea's ecosystem began to suffer.

(Dead Birds and Fish)

In the 1980s, outbreaks of botulism and algae blooms killed millions of fish. And then, the birds began to die. Today, the shoreline often serves as a graveyard for thousands of waterfowl. In one three month period 150,000 eared grebes died. Though the exact cause remains unknown most scientists believe the dead birds fed on tainted fish.

(Ghost Town)

What is known is that the die-offs changed the public's perception of the sea.

Tom Kirk

The Salton Sea is a maligned resource in many ways because it's been discarded. It was well used in the 1960s as folks came out here, built marinas and developments around the shoreline, used the Salton Sea to fish and to boat and water ski. That heyday is now gone. If you go around the Salton Sea today you see the remnants of the 1960s and the early 1970s, those marinas and hotels are gone now and dilapidated now and we don't have the visitation that we once did for all sorts of factors. One of them is folks' fear.

(Dead Birds)

Today, the biggest fear is that if the sea gets saltier it won't be able to support any life.

(Fish Testing)

Robert Schrag from the California State Wildlife and Game Service is monitoring the fishery.

Robert Schrag

Right now we're out gill netting, trying to find, important information regarding, age, size, weight, reproductive status. It's what we need to know to find out what's going on with the fish population. Worst-case scenario of the sea - it remains on the way it's going and basically becomes too salty to handle the fish so that they can reproduce and if that happens we're going to lose some of the fishing eating birds, actually most of the fishing eating birds. It's an important part of the ecosystem here.

Though recent tests indicate that the salinity of the Sea is still low enough for fish to reproduce there exists another serious threat and it's all about who owns the rights to Colorado River water.

(Canals)

Released on demand from the Hoover Dam the water that sustains the Salton Basin travels fourteen hundred miles. Just before the river crosses into Mexico, much of its volume is diverted into a series of canals eventually bringing life to the farms of the Imperial and Coachella Valleys. Today, these farms consume half of California's share of Colorado River water; more than Los Angeles and San Diego combined. This has long been the focus of legal battles with the water-starved communities of Southern California.

Tom Kirk

In the West, for you to establish a right to water you have to get to it and use it. The environment, unfortunately, doesn't have as much standing as farmers and cities and the like, particularly along the Colorado River.

(Irrigation and Farming)

In an historic agreement, farmers have agreed to sell to San Diego county enough water to satisfy the needs of 2 million people each year. But this has also trapped the Salton Sea between the needs of its fragile ecosystem, and the conflicting interests of farmers and developers.

Tom Kirk

For every drop of water being moved to the urban California coast, to San Diego, that means one drop less of water flowing into the Salton Sea.

Larry Cox

Keeping the Salton Sea alive isn't necessary for us to keep farming and in some ways it's almost detrimental because if, if the Salton Sea is to be mandated to stay alive and we have to be careful with the quality of our drain water that goes off there. And from a farming standpoint we look at it as an agricultural sump, to which it was designated.

Tom Kirk

If those flows stop coming to the Salton Sea we'll see a immediate decline in the fishery and an immediate decline in the health of the Salton Sea and our ability to sustain the environmental bounty that we currently sustain.

Ted Schade**Great Basin Unified Air Pollution Control District**

One of the things that I'm concerned about with the Salton Sea is that as the flows into the sea are reduced, the sea will get smaller. And as the sea gets smaller, lakebed will be exposed. Estimates are somewhere between 70 and 100 square miles of lakebed won't be covered with water anymore.

What exactly are the consequences of an inland sea drying up? Should the people living near the Salton Sea be concerned? And what can we learn from an event that happened 7,000 miles and a world away from California?

(Barren desert)

Here, in a remote corner of Uzbekistan, in Central Asia, the nearest body of water is almost 90 miles away.

(Rusted boats)

Yet, in this seemingly uninhabited wilderness, there exists an extraordinary sight, a vast graveyard of boats in the middle of the desert. These are the abandoned skeletons of a once proud and prosperous fishing fleet.

(Archival footage)

Today the ruins are a reminder that forty years ago these sand dunes were covered by an ocean of fresh water. How could this happen? How could the world's fourth largest inland body of water, the Aral Sea, become the site of what the United Nations calls man's greatest ecological disaster? And what does this tell us about the future of the Salton Sea?

(Samarkand)

Our story begins in the ancient city of Samarkand. The early morning hours could be a scene out of Marco Polo's journal. It seems like a moment suspended in time, a reflection of the ethnic sweep of Central Asian history, the conquests of Alexander the Great and Genghis Khan. These are the descendants of nomads who lived twenty-five hundred years ago when Samarkand was at the crossroads of the greatest trade route in history, the legendary Silk Road.

(Silk Road)

Desert caravans connecting China and Rome brought with them not only an exchange of goods but new ideas, new cultures, new religions.

(Mosques)

Though the Silk Road traders and marauders are long gone, their spiritual and cultural legacies remain. The heart and soul of Samarkand is a medieval complex, a center of religious scholarship. Restored to its original splendor it's an architectural wonder of the Islamic world. And beyond these walls is a country and a people surrounded by ancient history, a people caught between their silk road heritage and the pressures of the 21st century.

(Tashkent)

Tashkent is Uzbekistan's capital. Home to nearly 3 million people, this is Central Asia's most modern city. Once at the crossroads of the ancient trade routes, unlike Samarkand, much of its history has been paved over. Tashkent's wide avenues are a gift from the country's most recent conqueror -- the Soviet Union. Though the Soviets have been gone since 1991, they left behind yet another legacy, a legacy based on their demand that Uzbekistan become a major producer of cotton.

(Construction)

In the early 1960s, engineers from the Soviet Union devised an ambitious program. They decided to reshape the desert, to turn sand into cotton, to help save the Soviet's failing economy. Tens of thousands of workers built a vast network of irrigation canals covering one hundred thousand square miles. Water laced with fertilizers and pesticides was pumped onto the land. Within a decade, Uzbekistan became the world's second-largest producer of cotton. But that was when the country's largest river, the Amu Darya, was an untapped source of water. It was a river so wide it took Alexander the Great's army five days to cross it.

(Dry River)

Today the lower Amu Darya has been sucked dry by upstream cotton farms. Huge pumps that once diverted water for irrigation are idle. Dried-out canals scar the landscape. Deprived of water, river traffic is non-existent. Abandoned cargo boats litter the shoreline, mute testimony to a misguided agricultural policy. And a river, once wider than the Mississippi, never reaches its natural destination, the Aral Sea.

(Computer Image)

Computer images based on satellite data document the event. As an expanding cotton industry consumed almost all the water flowing into the Aral Sea, it began to shrink. In just over three decades an ancient and thriving ecosystem was half its original size.

(Archival Fishing Industry)

Before the collapse of the Aral Sea a fleet of soviet trawlers worked these rich waters. They were joined by fishermen from all over Central Asia. Each year they brought in over 50,000 tons of fish. Every day hundreds of boats pulled into Moynak, Uzbekistan's largest port, their holds filled with over 20 different species of fish. Conveyor belts carried their cargo directly into dockside processing plants. At the peak the canneries produced over 12 million tins of fish a year and employed three thousand people. Moynak's population grew to over 40,000.

(Moynak)

But in the end, they lost everything. Today Moynak is a virtual ghost town, now ninety miles from the receding shores of a barren lifeless sea. For those that stayed behind there is very little to do. They are part of the Karakalpak population, a proud people with their own ethnic traditions, language and culture. But with the destruction of the ecosystem, their very existence is under attack.

Anthony Kolb
Doctors Without Borders

Moynak, the city that's been most affected by the Aral Sea crisis has never been an easy place to live. The attachment to the land is very strong. This is their homeland; the Karakalpak people have been here. This is their identity, this land, and for them to try to move now, to find another place, is not easy.

(Cotton Harvest)

Not very far from Moynak, Guldabay Jumamuratov and his family are gathering cotton. Once this was a season of great promise. Today sources of water are drying up and what's available is too salty and tainted with chemicals. Guldabay has worked his ancestral farm all his life. When he was the age of his grandchildren this small farm would yield four tons of cotton. Now they are lucky to gather half that amount.

(Shanty Town)

The family has no other choice than to struggle on or join the hundreds of thousands who have moved to the shantytowns that surround the Aral Sea. Nearly all are Karakalpak settlements that have little infrastructure with no running water, sanitation, or healthcare facilities. Of the three million people living near the Aral Sea, over 40% are unemployed. Everyone is an environmental refugee, fleeing from the destruction of an inland ocean. But all they found were poverty and disease.

(TB hospitals)

The region has one of the highest rates of tuberculosis in the world.

Anthony Kolb

It's certainly well known that tuberculosis is a disease of the poor. TB bacilli is present in, some say up to a third of the world population. But people don't get sick from TB all over the world. It's places where people are challenged by their environment or by their social conditions.

Tuberculosis is a disease that preys upon the weak and malnourished. It doesn't discriminate between age or sex. In recent years drug resistant strains of TB have developed. Difficult to treat effectively, for the former fishermen, canners, and cotton farmers of Moynak the prognosis is not very hopeful. However, tuberculosis is not the only health problem spawned by the collapse of the Aral Sea.

(Wind Storm)

Every year windstorms sweep across the exposed seabed picking up millions of tons of toxic salt and the residue of agricultural chemicals, including DDT. This legacy of the cotton industry has left behind the planet's highest concentration of air-borne pollutants. Villages are covered with lethal dust, surface water and communal wells are contaminated. The most seriously affected are women and young children.

Devra Davis

University of Pittsburgh Cancer Center

Uzbekistan faces a tragedy of enormous proportion. The mothers and fathers who will create children in Uzbekistan, themselves, have bodies that have heavy levels of certain metals and pollutants that we understand have an affect on their capacity to become parents, as well as influencing the health of the children they may produce.

(Hospital)

Dr Oral Ataniyazova is the Director of the Center for Human Reproduction and Family Planning. She and her staff are trying to cope with an unprecedented environmental crisis.

Oral Ataniyazova

The Aral Sea crisis is not only environmental crisis. This is a big, human crisis, because, we have now third generation of people who are living in such polluted area.

Twenty-five years of contaminated water and air are taking a toll. Ninety per cent of pregnant women suffer from anemia. Not unlike the Inuit of the arctic, their breast milk contains high levels of agricultural chemicals. The effect on infants is devastating. Five percent of newborns have birth defects, ten percent will die before their first birthday.

Oral Ataniyazova

I think the Aral Sea crisis is one of the dramatic examples of what could be happen if the environment and irrigation system is mismanaged.

And for the people of Uzbekistan the death of the Aral Sea has become a never ending nightmare.

(Cemetery)

Not very far from Moynak are the ruins of a Silk Road city. A nearby cemetery dates back to the time of Genghis Khan. This particular mausoleum is considered by the Karakalpak people to be a holy shrine. Along these medieval walls are groups of seven stones piled on top of each other. Placed there by an occasional and hopeful visitor it is said that when each stone falls, a wish is granted. Here in a remote corner of Central Asia there are few hopes left.

(Desert/Palm Springs)

Though most scientists have concluded that it's too late to save the Aral Sea it does serve as a graphic warning for the people of Palm Springs who may live in the path of a potential storm of toxic dust.

(Wind Farms)

Not very far from the Salton Sea is a vast network of generators that harness the power of the wind. Providing enough electricity for the entire Coachella Valley, they also serve as a reminder that high winds are a natural part of the local environment.

(Receding Salton Sea)

As the Salton Sea begins to recede toxic dust storms will inevitably come off the dried-out lakebed. Despite this danger, the transfer of water to San Diego has gone forward without an agreed upon plan or even adequate funds to remedy the situation.

Tom Kirk

Salton Sea Authority

The Salton Sea, while it's California's largest lake it's in this corner of California that people don't pay a lot of attention to. Unfortunately, those folks that don't pay a lot of attention to it today may have to in the future as the sea recedes and we have these environmental problems increasingly, that's going to directly affect their lives. And they may not be concerned about the 400 species of birds here. They may not be concerned about the prolific fishery, but when the Salton Sea starts affecting human health in the Coachella and Imperial Valleys, they better care.

(Closing Montage)

Though there are no easy answers or quick solutions to severe environmental problems, we now know that it's necessary to strike a balance between economic development and what nature can safely provide.

Devra Davis

We know that children who are born in poverty lack good nutrition, lack access to health care, and if in addition to those basic problems they also are growing up in a more polluted environment, they're really at double jeopardy

We also know that many communities are struggling with forces well beyond their control.

Sheila Watt-Cloutier

Because we are a people that live on the ice and snow, we witness the most minute of changes to the environment and so we are the canary in the mine, so to speak. And it's very important, I think, that the world pay heed to this.

Though separated by distance and culture, in the end the health of those living in places like the Arctic and Barrio Logan cannot be separated from those living in Colonia Chilpancingo, Uzbekistan, and Palm Springs.

This new reality presents us with enormous challenges for the future, a future, conditional on providing new ideas, new attitudes, new hope. Planet Earth, this is our home. This is where our journey of discovery must begin.

[Closing Credits]

[Funding Credits]

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