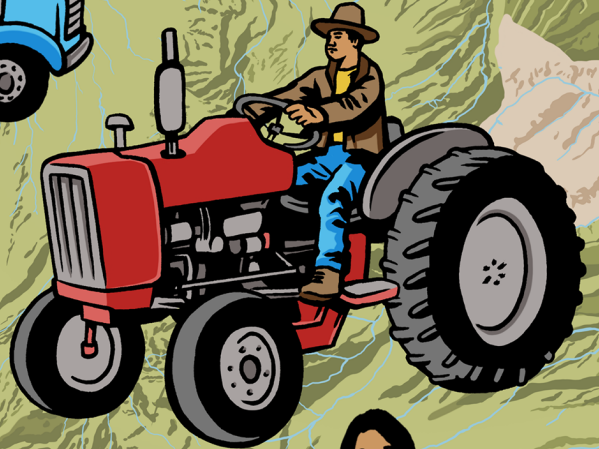
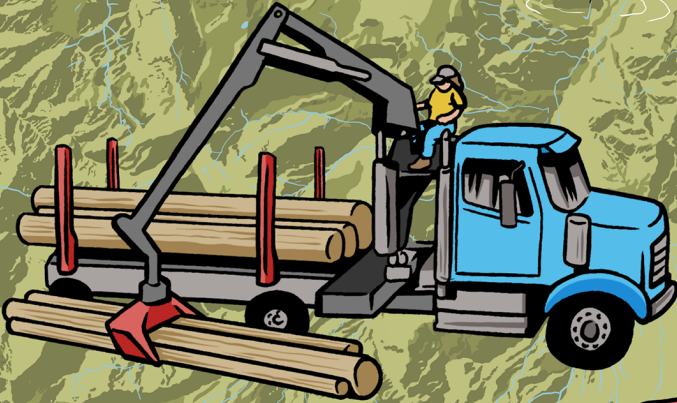


Hood River Watershed



WELCOME!

THIS COMIC IS BROUGHT TO YOU BY THE HOOD RIVER WATERSHED GROUP AND TELLS THE STORY OF THE PEOPLE, ECOLOGY, AND CONSERVATION OF THE HOOD RIVER WATERSHED.

THE HOOD RIVER WATERSHED GROUP IS A NONPROFIT 501(C)(3) ORGANIZATION WHOSE PURPOSE IS TO SUSTAIN AND IMPROVE THE HOOD RIVER WATERSHED THROUGH EDUCATION, COOPERATION, AND STEWARDSHIP. WE WORK WITH COMMUNITY MEMBERS, TRIBES, AGENCIES, AND LOCAL ORGANIZATIONS AND BUSINESSES TO RESTORE THE WATERSHED AND BUILD A RESILIENT LANDSCAPE THAT SUPPORTS FISH, WILDLIFE, AND PEOPLE.

OUR PARTNERS INCLUDE THE CONFEDERATED TRIBES OF WARM SPRINGS, U.S. FOREST SERVICE, HOOD RIVER SOIL & WATER CONSERVATION DISTRICT, OREGON DEPARTMENT OF FISH & WILDLIFE, EAST FORK IRRIGATION DISTRICT, FARMERS IRRIGATION DISTRICT, MIDDLE FORK IRRIGATION DISTRICT, HOOD RIVER COUNTY, COLUMBIA LAND TRUST, NATURAL RESOURCES CONSERVATION SERVICE, AND DOZENS OF LANDOWNERS AND COMMUNITY VOLUNTEERS! THE WATERSHED GROUP OFFERS MANY OPPORTUNITIES TO ENGAGE WITH THE ORGANIZATION AND WATERSHED. VISIT OUR WEBSITE TO LEARN MORE!

WWW.HOODRIVERWATERSHED.ORG

Watershed
/'wäder, SHed/
noun

An area or region drained by a river or river system



WY' EAST
WATERSHED



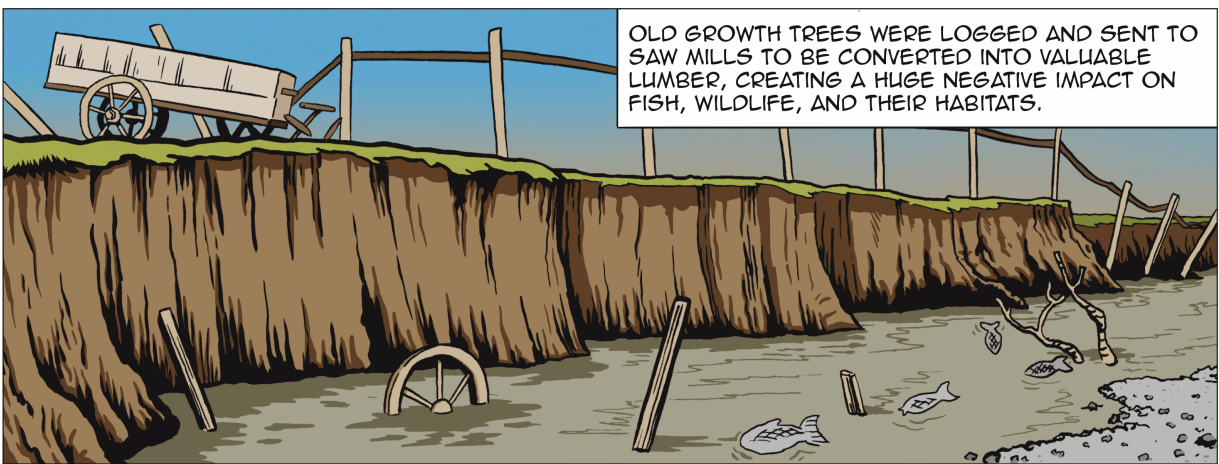
THE HOOD RIVER WAS ONCE
CHOKED WITH LOGS HEADED TO
THE SAWMILL AND THE
SURROUNDING RIPARIAN ZONE* WAS
GREATLY DIMINISHED.

*DERIVED FROM LATIN RIPA, MEANING
RIVER BANK.

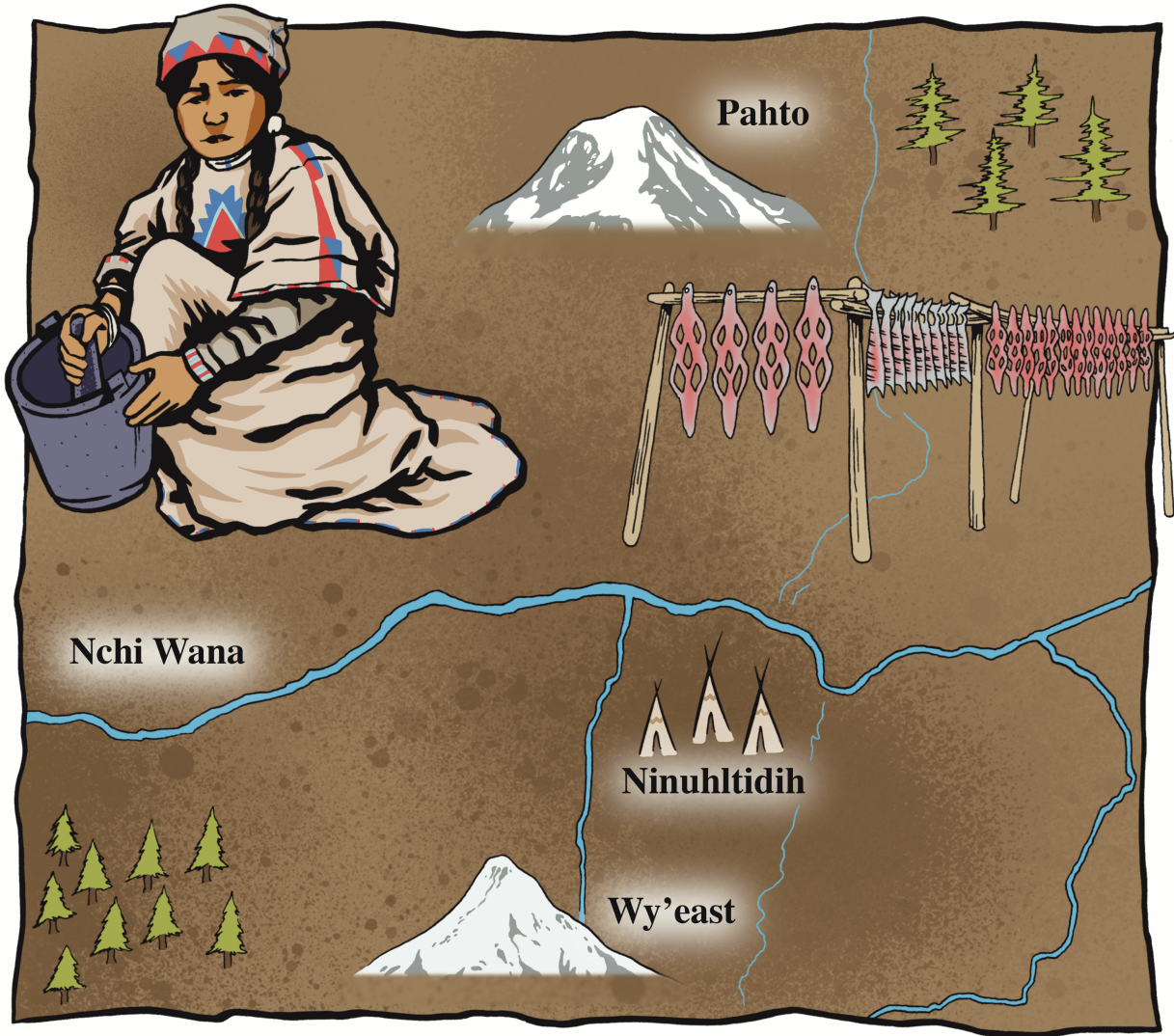
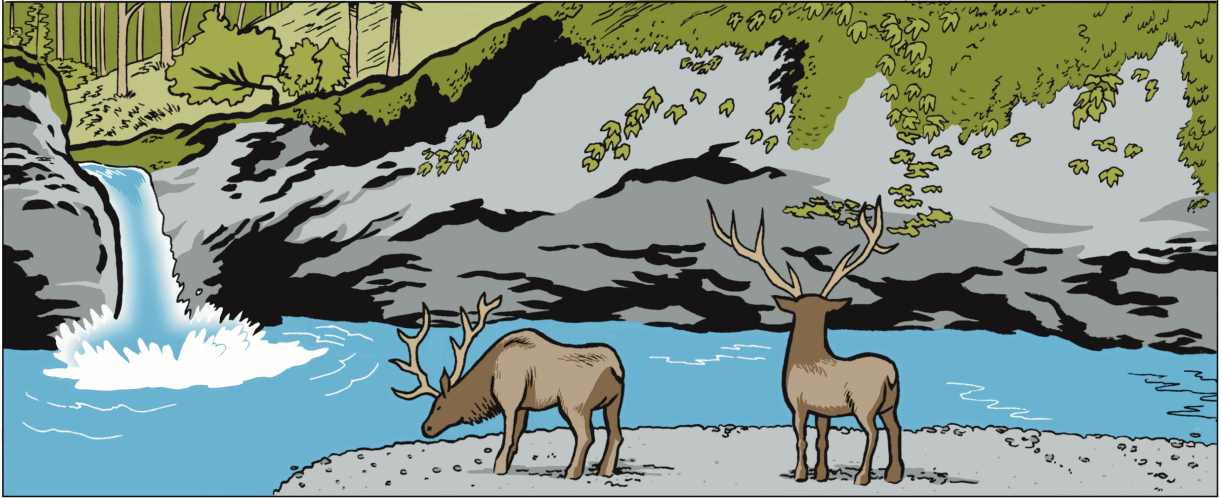
THE ABUNDANCE OF TREES IN OREGON
WERE SEEN AS GREEN GOLD, FUELING AN
ECONOMY WHERE TIMBER WAS KING.



OLD GROWTH TREES WERE LOGGED AND SENT TO
SAW MILLS TO BE CONVERTED INTO VALUABLE
LUMBER, CREATING A HUGE NEGATIVE IMPACT ON
FISH, WILDLIFE, AND THEIR HABITATS.



BUT FOR THE RIVER THAT FLOWS FROM THE MOUNTAIN FORMED MILLIONS OF YEARS AGO, THERE WAS A TIME BEFORE EUROPEAN SETTLERS. A TIME WHEN THE LAND WAS HOME TO BANDS OF CHINOOK-SPEAKING PEOPLE WHO FLOURISHED IN THE SHADOWS OF WY'EAST AND PAHTO. A TIME IMMEMORIAL...

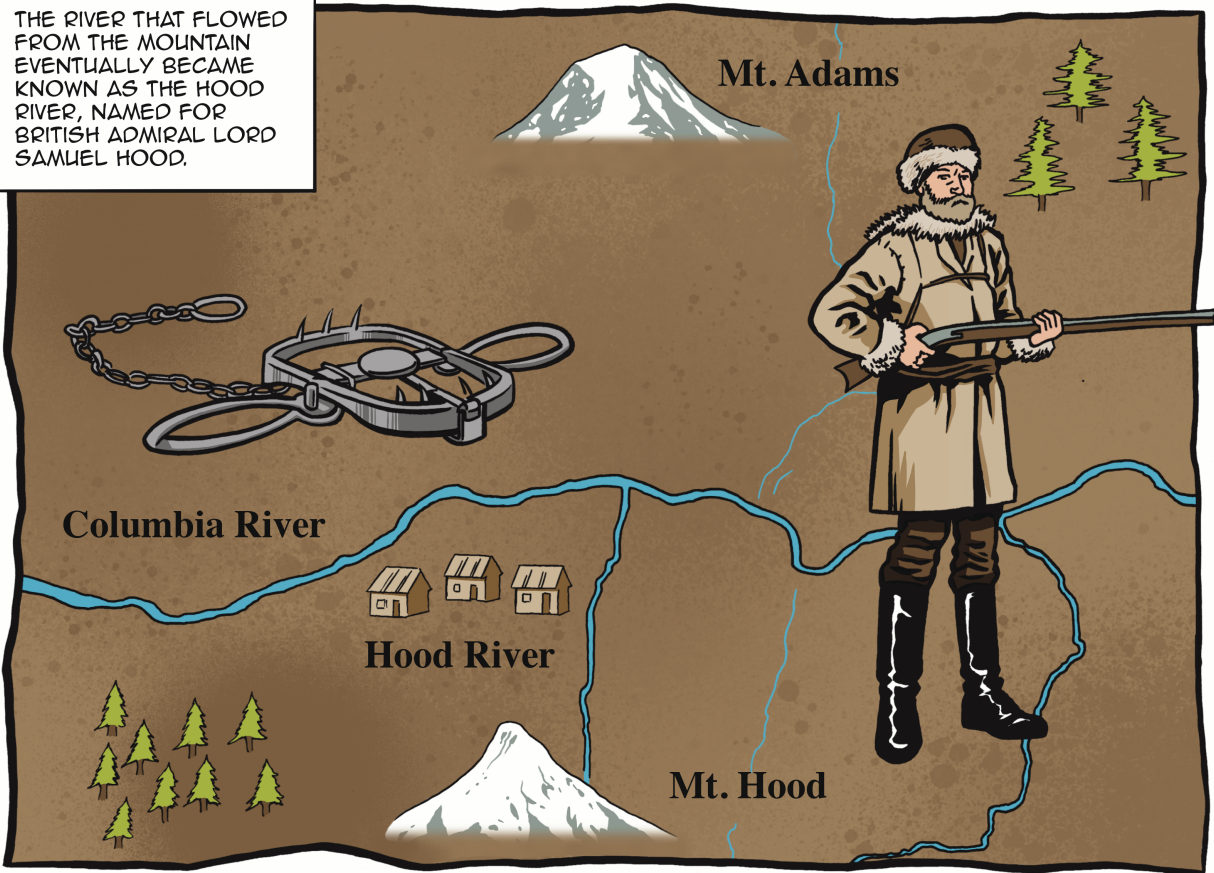


WASCO-WISHRAM ARE TWO OF THE LOCAL TRIBES WHO HARVESTED SALMON. THE WOMEN CREATED THE HIGHLY-PRIZED FIRST FOOD ITK' ILAK OR SALMON MEAL. ITK' ILAK ALONG WITH ROOT BREAD AND BEAR GRASS WERE IMPORTANT TRADE ITEMS WITH NEARBY TRIBES.

THE ARRIVAL OF LEWIS & CLARK'S CORPS OF DISCOVERY IN 1805 LED TO THE CREATION OF WILLIAM CLARK'S MASTER MAP OF THE NORTH AMERICAN WEST.



THE RIVER THAT FLOWED FROM THE MOUNTAIN EVENTUALLY BECAME KNOWN AS THE HOOD RIVER, NAMED FOR BRITISH ADMIRAL LORD SAMUEL HOOD.



FUR TRADERS NEXT MADE THE OVERLAND JOURNEY VIA THE OREGON TRAIL. THEY WERE SOON FOLLOWED BY THE SETTLERS AFTER CONGRESS PASSED THE DONATION LAND CLAIM ACT OF 1850 TO PROMOTE SETTLEMENTS IN THE OREGON TERRITORY.



DECADES OF SETTLER CONTACT LEFT THE COLUMBIA RIVER TRIBES DECIMATED BY DISEASE AND VIOLENCE, AND EVENTUALLY LED TO THEIR DISPLACEMENT TO RESERVATIONS.

THE TREATY OF 1855 CREATED THE FOUR, SOVEREIGN COLUMBIA RIVER TRIBES (NEZ PERCE, UMATILLA, WARM SPRINGS AND YAKAMA), WHO CEDED OVER 10 MILLION ACRES OF TRIBAL TERRITORY IN EXCHANGE FOR SPECIFIC RESERVATION LANDS AND FISHING RIGHTS AT *ALL USUAL AND ACCUSTOMED PLACES* IN THE COLUMBIA RIVER BASIN.



THE WASCO-WISHRAM ARE NOW ENROLLED TRIBAL MEMBERS OF THE CONFEDERATED TRIBES OF THE WARM SPRINGS AND LARGELY RESIDE ON A RESERVATION NEARLY 100 MILES INLAND SOUTHEASTERLY.



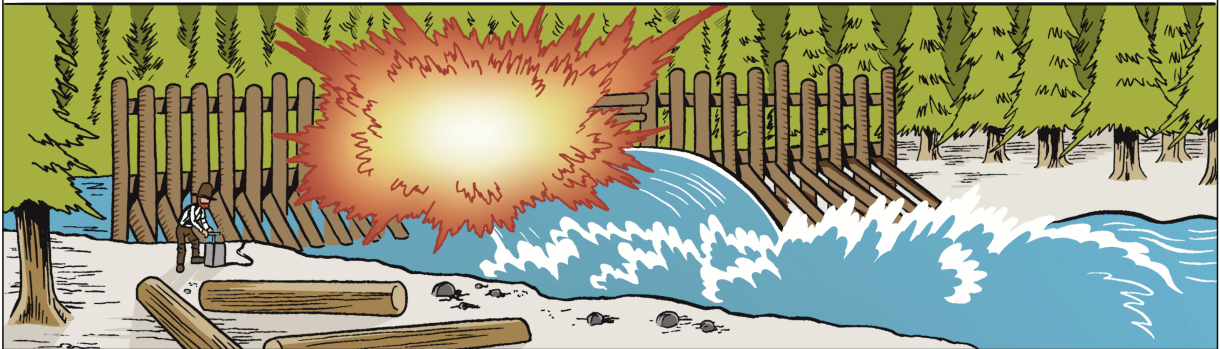
AS SETTLERS ARRIVED IN THE HOOD RIVER VALLEY, THEY BEGAN HARVESTING OLD GROWTH TREES AND CLEARING LAND FOR THEIR FARMS AND HOMESTEADS.



HARVESTED LOGS WERE STORED IN STREAMS BEHIND "SPASH DAMS," TEMPORARY DAMS THAT WOULD LATER BE BLOWN UP OR BURNED. BREACHING THE SPASH DAMS RELEASED THE LOGS DOWNSTREAM IN A DESTRUCTIVE TORRENT OF WATER WHICH SCoured THE RIVERBED AND STRIPPED FISH HABITAT.



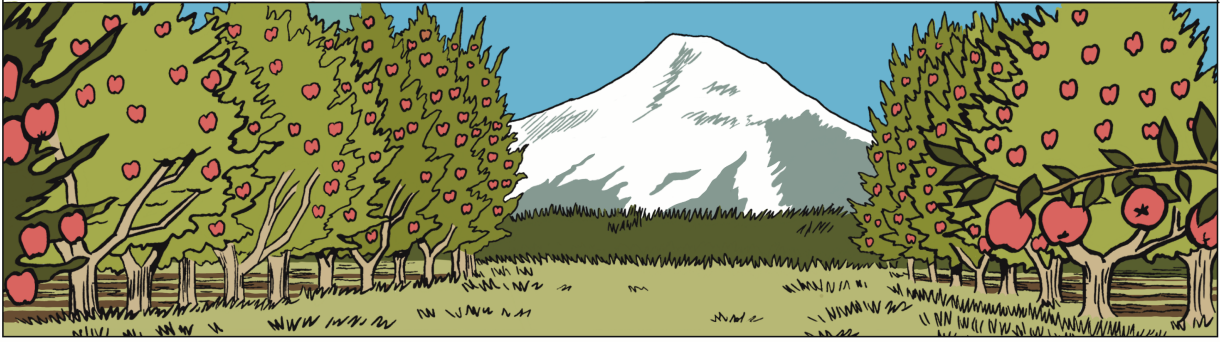
BEGINNING IN 1861 AND CONTINUING FOR OVER A CENTURY, SAWMILLS, SPASH DAMS AND MILL PONDS OPERATED THROUGHOUT THE WATERSHED. STREAMS WERE USED TO CARRY LOGS DOWN TO THE MILLS AND THE RAILROAD.



THE MILL PONDS WERE THE LOG'S FINAL STOP BEFORE BEING CONVERTED INTO LUMBER AT THE SAWMILL. FALLEN TIMBER'S JOURNEY FROM THE FORESTS THROUGH THE SPASH DAMS AND DOWN THE STREAMS HAVE ONGOING NEGATIVE IMPACTS ON THE WATERSHED.

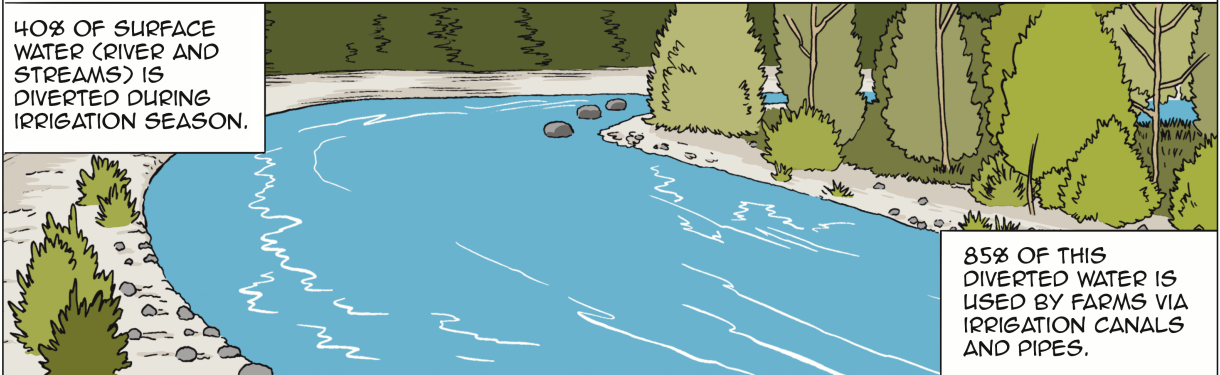


BY THE TURN OF THE 20TH CENTURY, HOOD RIVER HAD BECOME A HUB OF LOGGING AND AGRICULTURE, PRIMARILY ORCHARDS. THE CLIMATE AND VOLCANIC SOIL OF THE HOOD RIVER VALLEY PROVED TO BE FERTILE FARMLAND. TWENTY FIVE YEARS AFTER THE ONSET OF LOGGING OPERATIONS, COMMERCIAL APPLE ORCHARDS THRIVED ON CLEARED FOREST LAND.



THIS NEW AGRICULTURE INDUSTRY REQUIRED WATER, RESULTING IN THE CONSTRUCTION OF HUNDREDS OF MILES OF IRRIGATION DITCHES DIVERTING WATER FROM THE HOOD RIVER TO FRUIT TREES.

40% OF SURFACE WATER (RIVER AND STREAMS) IS DIVERTED DURING IRRIGATION SEASON.

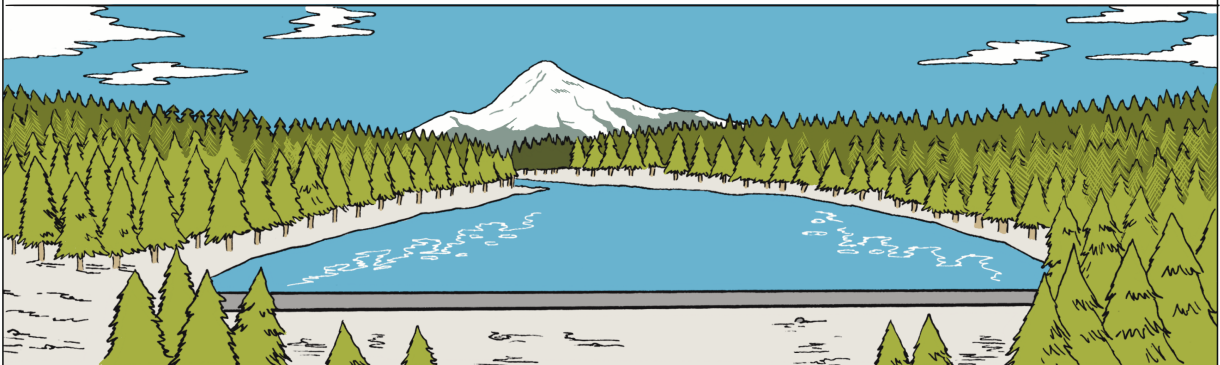


85% OF THIS DIVERTED WATER IS USED BY FARMS VIA IRRIGATION CANALS AND PIPES.

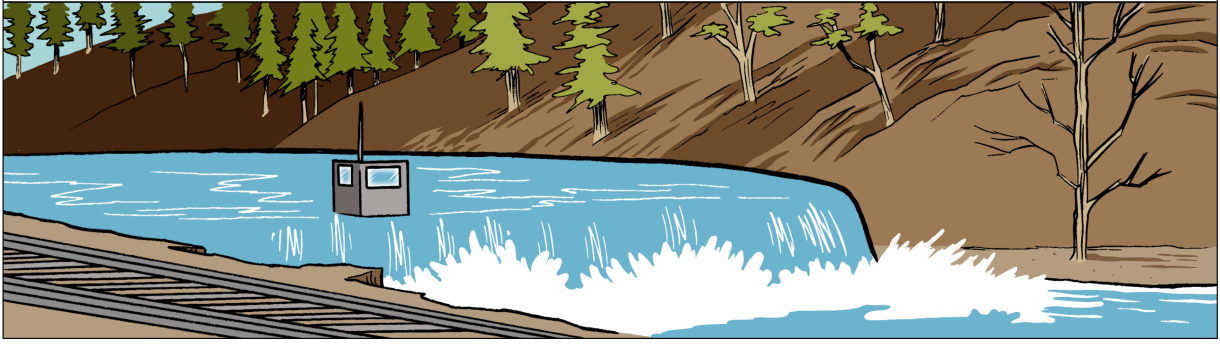
THE FARMERS IRRIGATION DITCH WAS COMPLETED IN 1897 AND TRANSFORMED THE VALLEY FRUIT INDUSTRY INTO A COMMERCIAL SUCCESS.



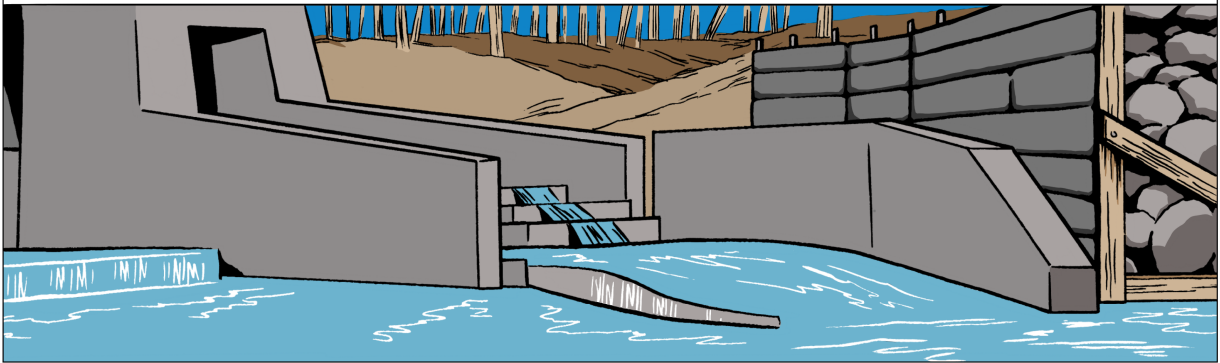
THE HOOD RIVER VALLEY IRRIGATION DISTRICTS (FARMERS, EAST FORK, MIDDLE FORK, DEE & MT. HOOD) WOULD EVENTUALLY CONSTRUCT CANALS AND RESERVOIRS TO PROVIDE WATER DELIVERY AND STORAGE FOR ORCHARDS.



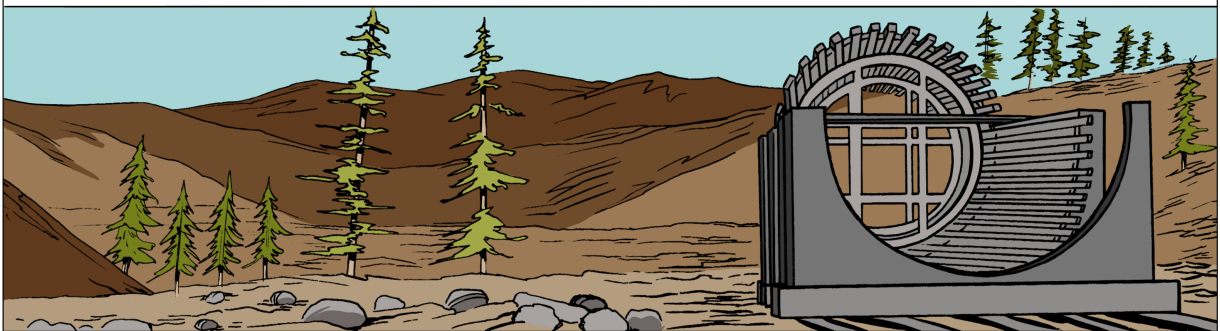
THE SUCCESS OF THE ORCHARD INDUSTRY DROVE THE EARLY DEMAND FOR ELECTRIFICATION IN THE HOOD RIVER VALLEY. HYDROPOWER PRODUCTION IN THE WATERSHED BEGAN IN 1909 WITH THE CONSTRUCTION OF THE FIRST POWERDALE DAM ON THE HOOD RIVER. A SECOND DAM REPLACED THE ORIGINAL BY 1923.



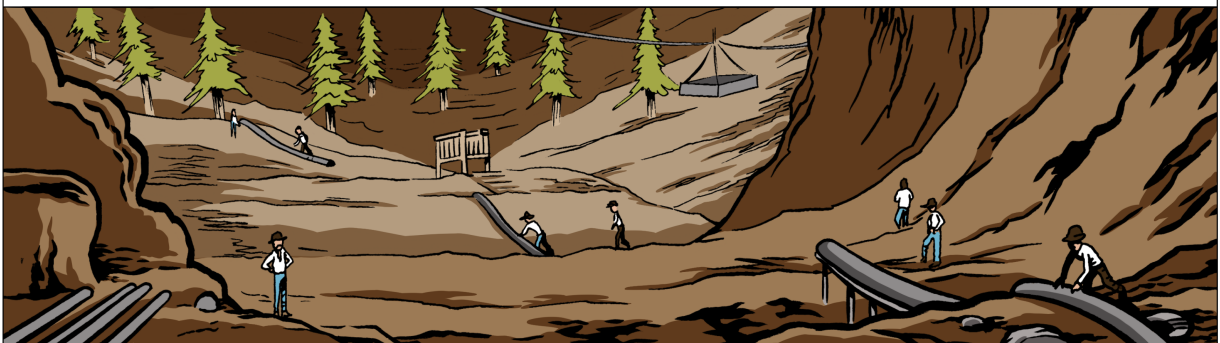
THE POWERDALE DAM WAS ONCE THE LARGEST SINGLE POWER UNIT IN OREGON. THE DAM HAD A FISH LADDER THAT ALLOWED PASSAGE OF MOST ADULT SALMON AND STEELHEAD, BUT IT CREATED A SIGNIFICANT BARRIER FOR YOUNG SALMON AND A COMPLETE BLOCKADE FOR PACIFIC LAMPREY.



WITHIN FIFTEEN YEARS, POWERDALE'S 6-MEGAWATT HYDROPOWER ENERGY OUTPUT WOULD BE ECLIPSED BY THE 40 TIMES MORE POWERFUL BONNEVILLE DAM ON THE COLUMBIA RIVER. THE DAM AND POWERHOUSE WOULD REMAIN FOR ANOTHER SEVEN DECADES, HOWEVER, UNTIL FINALLY DEEMED AN ECONOMIC NET LOSS IN 2010.

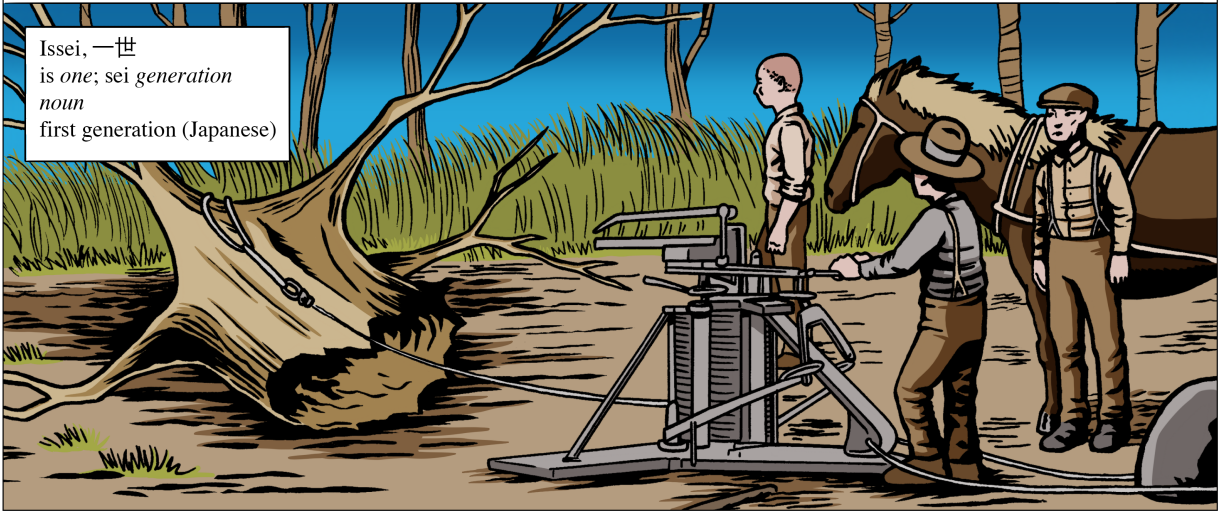


NEARLY EVERY LARGE INFRASTRUCTURE PROJECT IN AMERICAN HISTORY WAS BUILT WITH IMMIGRANT LABOR. THE POWERDALE DAM WAS NO EXCEPTION BEING CONSTRUCTED BY NEWLY-ARRIVED GREEK LABORERS. JAPANESE WORKERS HAD BEEN RECRUITED TO THE HOOD RIVER VALLEY DECADES EARLIER TO WORK AS SECTION HANDS, LOGGERS, AND SAWYERS.



THESE JAPANESE IMMIGRANTS KNOWN AS ISSEI ALSO WORKED CLEARING LAND BY REMOVING THE STUMPS THAT REMAINED AFTER CLEAR CUT LOGGING. THEY EARNED 5-ACRE PLOTS OF LAND FOR EVERY 15 ACRES OF FOREST CLEARED.

Issei, 一世
is one; sei generation
noun
first generation (Japanese)



THE ISSEI WERE OFTEN ALLOCATED LESS FERTILE STUMPLAND OR MASHLAND ALONG THE RAIL ROUTE IN THE COMMUNITIES OF PINE GROVE, OAK GROVE, ODELL, DEE, AND PARKDALE.



THEY MADE THE MOST OF THEIR MARGINAL LAND BY CULTIVATING ASPARAGUS AND STRAWBERRIES AS QUICK CASH CROPS BETWEEN THE ROWS OF APPLE SEEDLINGS IN YOUNG ORCHARDS.



ISSEI FARMERS PRODUCED 75% OF HOOD RIVER COUNTY STRAWBERRIES BY THE 1920S. WHEN HOOD RIVER SECURED ITS FIRST PLACE RANKING OF STATE FRUIT HARVEST IN THE EARLY 1940S, 25% OF ORCHARDISTS WERE ISSEI OR THEIR AMERICAN-BORN CHILDREN, THE NISEI.

Nisei, 二世,
ni two; sei generation
noun
second generation (Japanese)



DON WAKAMATSU IS YONSEI, A FOURTH GENERATION OREGONIAN. HIS GRANDPARENTS' LAND WAS IN ONE OF THE AREAS ONCE CONSIDERED LESS DESIRABLE STUMPLAND ALONG NEAL CREEK, A TRIBUTARY TO THE HOOD RIVER.

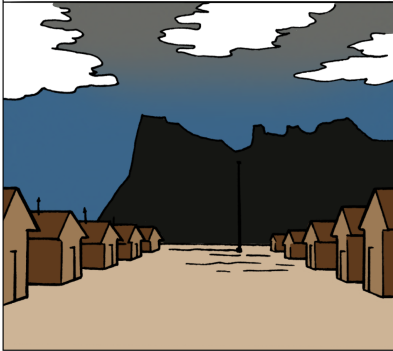


FARMING HAS A STRONG PULL AND INFLUENCE ON MY HEART.

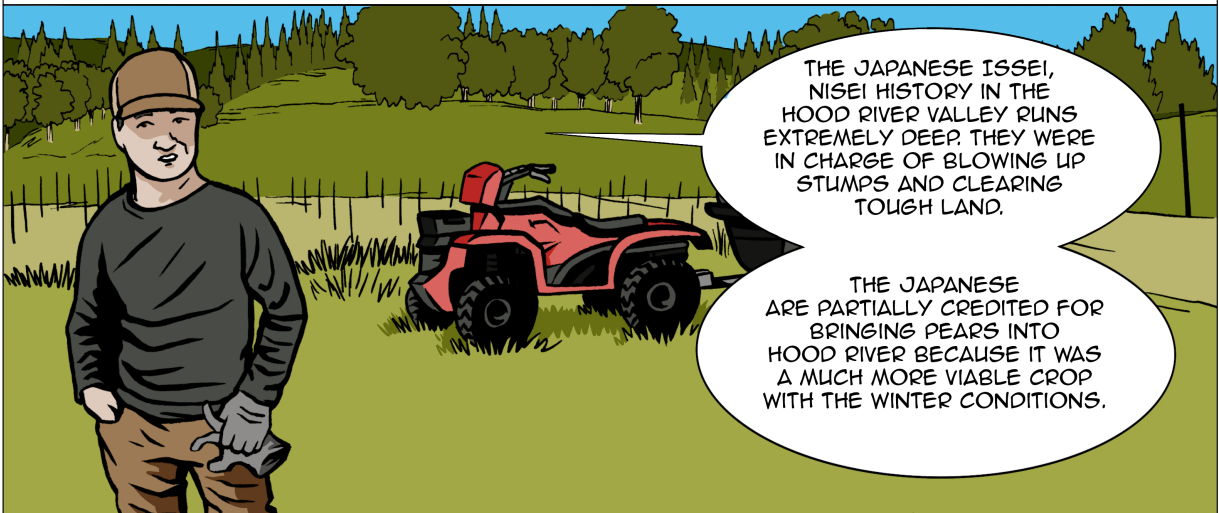
DON'S SANSEI FATHER WAS BORN AT THE TULE LAKE INTERNMENT CAMP. PRESIDENT FRANKLIN ROOSEVELT'S EXECUTIVE ORDER 9066 ESTABLISHED THE WEST COAST EXCLUSION ZONE. ALL PERSONS OF JAPANESE HERITAGE WERE FORCED FROM THEIR HOMES/LANDS AND INTO INTERNMENT CAMPS IN 1942.

FOUR OF HIS NISEI GREAT UNCLCS WERE VETERANS OF THE ALL-JAPANESE 442ND INFANTRY REGIMENT OF WORLD WAR II, THE MOST DECORATED UNIT IN US MILITARY HISTORY.

MY PERSONAL MISSION IS TO MAKE THIS A PLACE AS INVITING AS IT WAS WHEN I WAS A KID. IT'S ALL A HEALTHY ECOSYSTEM FOR THE FARM, BUT MORE IMPORTANTLY, THE FAMILY.



HE IS A DESCENDANT OF TALENTED ORCHARDISTS WHO FIRST GREW APPLES, LATER TRANSITIONING TO MORE COLD-TOLERANT PEARS AFTER THE DISASTROUS FREEZE OF 1919 AND HELPED ESTABLISH HOOD RIVER'S FIRST PLACE FRUIT EXPORT STATUS.



THE JAPANESE ISSEI, NISEI HISTORY IN THE HOOD RIVER VALLEY RUNS EXTREMELY DEEP. THEY WERE IN CHARGE OF BLOWING UP STUMPS AND CLEARING TOUGH LAND.

THE JAPANESE ARE PARTIALLY CREDITED FOR BRINGING PEARS INTO HOOD RIVER BECAUSE IT WAS A MUCH MORE VIABLE CROP WITH THE WINTER CONDITIONS.

LESS THAN ONE QUARTER OF JAPANESE FAMILIES EXILED DURING WORLD WAR II RETURNED TO THE HOOD RIVER VALLEY. THE WAKAMATSUS WOULD NOT BE TWICE-DRIVEN FROM THEIR HOMES, HOWEVER. THEY WERE ABLE TO RECLAIM SOME OF THEIR LAND AND RETURN TO THEIR FARMING LIVES AND LIVELIHOODS.



YOUNG DON SPENT HIS CHILDHOOD HARVESTING FRUIT, EXPLORING FORESTS AND FISHING LOCAL STREAMS. TODAY, DON'S NONPROFIT, WAKWAY, DOES OUTREACH TO VETERANS AND DISADVANTAGED YOUTHS AND FOCUSES ON PRECISION OR "SMART" FARMING-- INCORPORATING TECHNOLOGY TO REDUCE LABOR COSTS FOR SMALL FARMS.



DURING A RETURN VISIT TO HIS GRANDPARENTS' LAND, THE COLLINS FARM IN THE PINE GROVE REGION OF HOOD RIVER, DON BECAME DISMAYED BY THE DERELICT STATE OF THE STREAM RUNNING THROUGH THE PROPERTY. HE COULDN'T RECONCILE HIS BOYHOOD MEMORIES OF CATCHING TROPHY-SIZED TROUT WITH THE CONTEMPORARY VISION OF A DITCH CLOGGED WITH DEBRIS AND OVERGROWN WITH BLACKBERRIES.



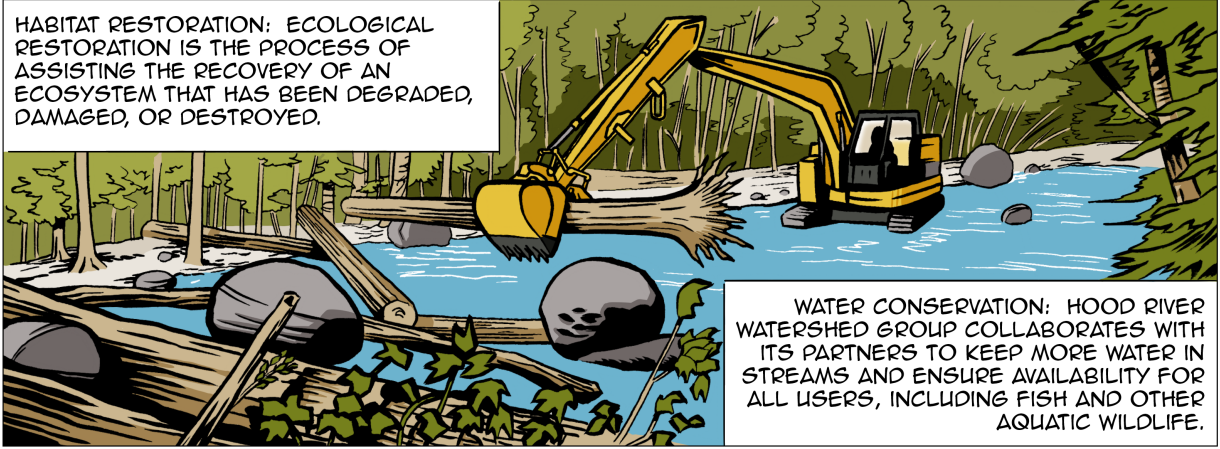
HE WAS BEGINNING TO INVESTIGATE PROPERTY REHABILITATION OPTIONS WHEN HE WAS CONTACTED BY THE HOOD RIVER WATERSHED GROUP BOTH THE WATERSHED GROUP AND THE CONFEDERATED TRIBES OF THE WARM SPRINGS HAD BEEN RESTORING NEAL CREEK FOR MANY YEARS.



THE HOOD RIVER WATERSHED GROUP WAS FORMED IN 1995, UNDER THE UMBRELLA OF THE HOOD RIVER SOIL & WATER CONSERVATION DISTRICT TO FOCUS ON IMPROVING THE WATERSHED. THEY TRANSITIONED TO A FULLY INDEPENDENT 501 (C) (3) NONPROFIT ORGANIZATION IN 2021 THAT WORKS TO SUSTAIN AND IMPROVE THE WATERSHED THROUGH HABITAT RESTORATION, WATER CONSERVATION, MONITORING AND EDUCATION.



HABITAT RESTORATION: ECOLOGICAL RESTORATION IS THE PROCESS OF ASSISTING THE RECOVERY OF AN ECOSYSTEM THAT HAS BEEN DEGRADED, DAMAGED, OR DESTROYED.



WATER CONSERVATION: HOOD RIVER WATERSHED GROUP COLLABORATES WITH ITS PARTNERS TO KEEP MORE WATER IN STREAMS AND ENSURE AVAILABILITY FOR ALL USERS, INCLUDING FISH AND OTHER AQUATIC WILDLIFE.

MONITORING: DATA GATHERING ALLOWS FOR THE ASSESSMENT OF WATERSHED HEALTH AND MONITORS THE IMPACT OF RESTORATION PROJECTS.



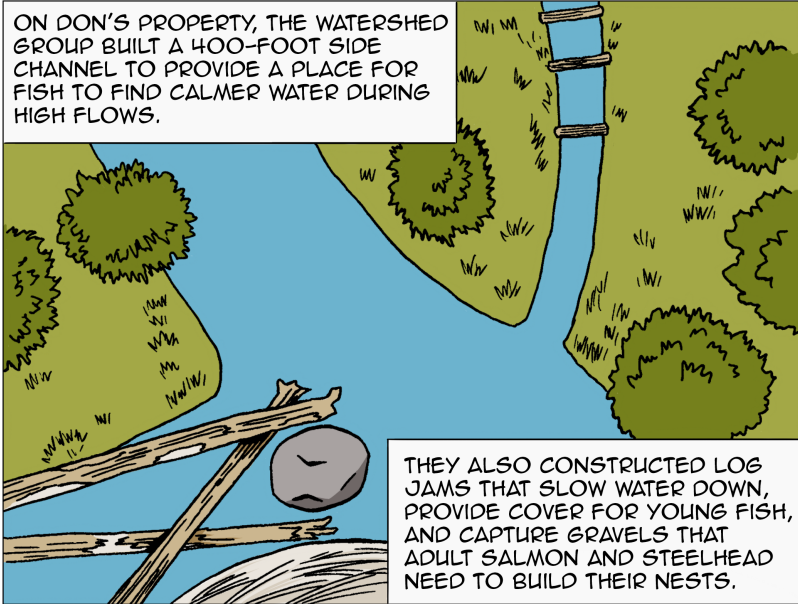
EDUCATION: HOOD RIVER WATERSHED GROUP FACILITATES COMMUNITY ENGAGEMENT, EDUCATIONAL OPPORTUNITIES, AND NETWORKING FORUMS TO FOSTER COOPERATION AMONG LANDOWNERS, COMMUNITY MEMBERS, TRIBES, IRRIGATION DISTRICTS, AND GOVERNMENT AGENCIES.



DON'S WILLINGNESS TO COOPERATE SERVED AS AN ANCHOR TO ALLOW SEVERAL MILES OF STREAM AND HABITAT RESTORATION ALONG NEAL CREEK.

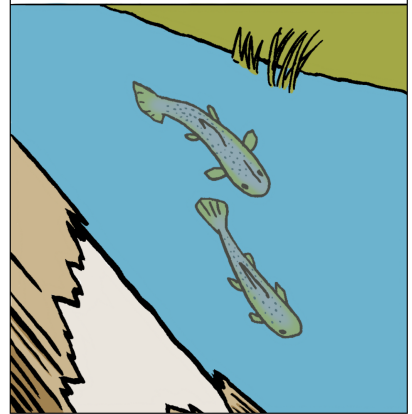


ON DON'S PROPERTY, THE WATERSHED GROUP BUILT A 400-FOOT SIDE CHANNEL TO PROVIDE A PLACE FOR FISH TO FIND CALMER WATER DURING HIGH FLOWS.

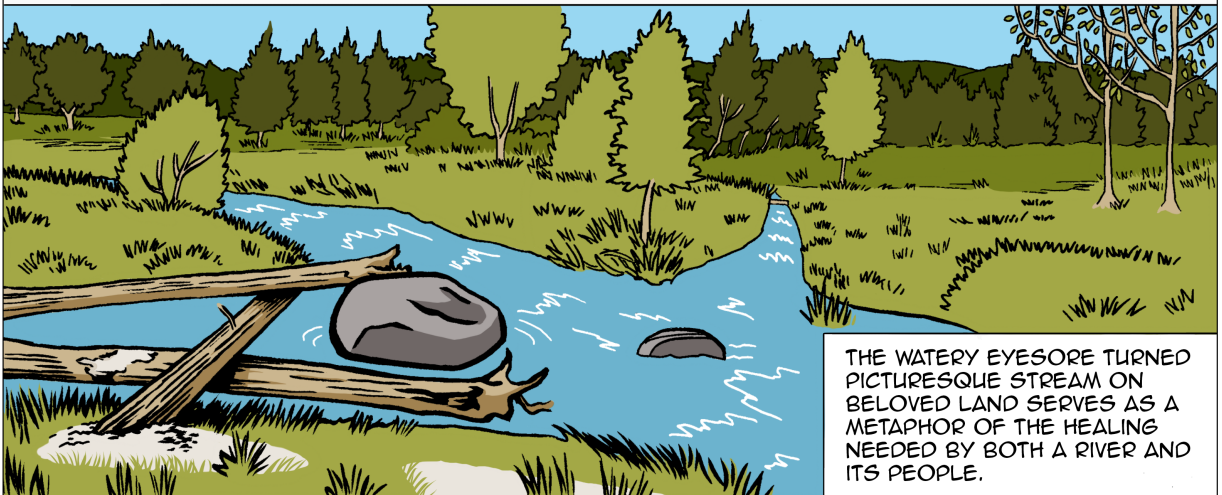


THEY ALSO CONSTRUCTED LOG JAMS THAT SLOW WATER DOWN, PROVIDE COVER FOR YOUNG FISH, AND CAPTURE GRAVELS THAT ADULT SALMON AND STEELHEAD NEED TO BUILD THEIR NESTS.

THEY CONSTRUCTED AN ALCOVE WHERE YOUNG COHO SALMON CAN FIND PROTECTION AND FOOD. IN FACT, A GROUP OF YOUNG COHO WERE SEEN USING THE ALCOVE THE VERY DAY AFTER CONSTRUCTION!



THE WAKAMATSUS' TENACIOUS LOVE OF LAND AND UNWAVERING SENSE OF PLACE MIRRORS THAT OF OTHER LOCAL INHABITANTS AND LED TO THEIR COOPERATION WITH THE RESTORATION WORK PROVIDED BY THE HOOD RIVER WATERSHED GROUP AND THE CONFEDERATED TRIBES OF THE WARM SPRINGS.



THE WATERY EYESORE TURNED PICTURESQUE STREAM ON BELOVED LAND SERVES AS A METAPHOR OF THE HEALING NEEDED BY BOTH A RIVER AND ITS PEOPLE.

THE AGRICULTURAL INDUSTRY IN THE HOOD RIVER VALLEY HAS A DIVERSE HISTORY. HOOD RIVER COUNTY IS 33% LATINO, THE THIRD-HIGHEST PERCENTAGE IN OREGON. MANY OF THOSE MEXICAN-AMERICAN FAMILIES IMMIGRATED TO THE UNITED STATES VIA THE MIGRANT FARM WORKER OR BRACERO PROGRAM.



Brazo
/brázo/
noun, masculine
arm (Spanish)

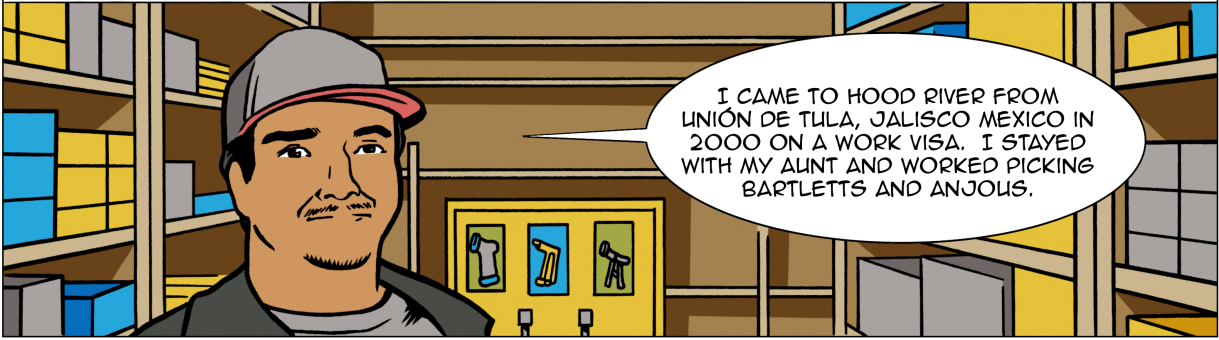
THE MEXICAN FARM LABOR AGREEMENT WAS ENACTED IN 1942 TO ADDRESS CRITICAL AGRICULTURAL LABOR SHORTAGES AND LASTED MORE THAN TWO DECADES. MILLIONS OF MEXICAN MEN PARTICIPATED IN THE PROGRAM. SOME SETTLED IN THE HOOD RIVER VALLEY AND WERE EVENTUALLY JOINED BY THEIR FAMILIES.



AS A RESULT, MANY MEXICAN-AMERICANS HAVE NOW CALLED HOOD RIVER HOME FOR AT LEAST THREE GENERATIONS. TODAY, DESCENDANTS OF THE BRACEROS ARE NOW VITAL CONTRIBUTORS TO THE HOOD RIVER ECONOMY AND COMMUNITY.

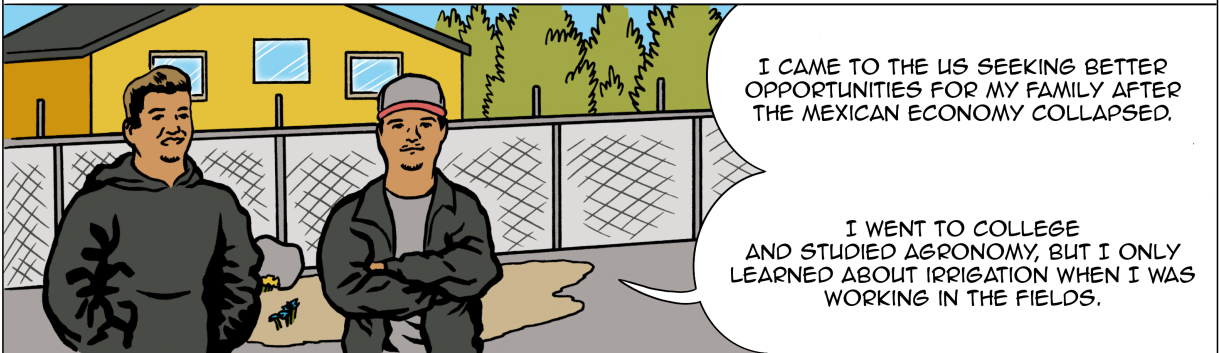


FELIPE MENDEZ IS AMONG HOOD RIVER'S NEWLY-IMMIGRATED MEXICAN-AMERICANS. HE WAS A TEENAGER WHEN HIS FAMILY LEFT MEXICO DURING THE EXODUS OF AGRICULTURAL WORKERS AFTER THE PASSAGE OF THE 1994 NORTH AMERICAN FREE TRADE AGREEMENT. HIS AGRICULTURAL BACKGROUND MAKES HIM ACUTELY AWARE OF THE NEED FOR WATER CONSERVATION.



I CAME TO HOOD RIVER FROM UNIÓN DE TULA, JALISCO MEXICO IN 2000 ON A WORK VISA. I STAYED WITH MY AUNT AND WORKED PICKING BARTLETTS AND ANJOUS.

FELIPE AND HIS BROTHER, PACO, STARTED ONSITE SUPPLY HOUSE TO HELP LOCAL RESIDENTIAL AND COMMERCIAL CUSTOMERS IMPLEMENT WATER-SAVING IRRIGATION SYSTEMS THAT BENEFIT THE WATERSHED'S FISH AND HABITAT.



I CAME TO THE US SEEKING BETTER OPPORTUNITIES FOR MY FAMILY AFTER THE MEXICAN ECONOMY COLLAPSED.

I WENT TO COLLEGE AND STUDIED AGRONOMY, BUT I ONLY LEARNED ABOUT IRRIGATION WHEN I WAS WORKING IN THE FIELDS.

WATER IS A LIMITED RESOURCE THROUGHOUT THE WATERSHED. THE HIGH WATER DEMAND PAIRED WITH LOW PRECIPITATION DURING THE SUMMER MONTHS IS UNSUSTAINABLE. THIS INCREASED WATER CONSUMPTION RESULTS IN DECREASED IN-STREAM AVAILABILITY FOR FISH AND OTHER AQUATIC LIFE.



LOCAL WATER-CONSCIOUS BUSINESSES LIKE ONSITE SUPPLY HOUSE PARTNER WITH THE WATERSHED GROUP, SOIL & WATER CONSERVATION DISTRICT, IRRIGATION DISTRICTS, FARMERS, LANDOWNERS AND COMMUNITY MEMBERS TO REDUCE WATER LOSS FROM IRRIGATION SYSTEMS AND IMPROVE NATURAL WATER STORAGE CAPACITY.



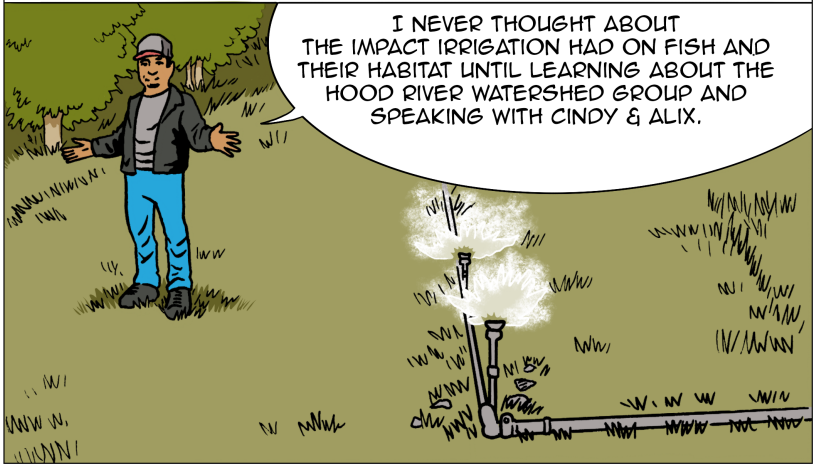
OREGON'S STATE FRUIT, THE PEAR, IS HOOD RIVER'S MOST IMPORTANT AGRICULTURAL EXPORT. LOCAL ORCHARDS PRODUCE NEARLY ONE QUARTER OF THE NATION'S SUPPLY.

15



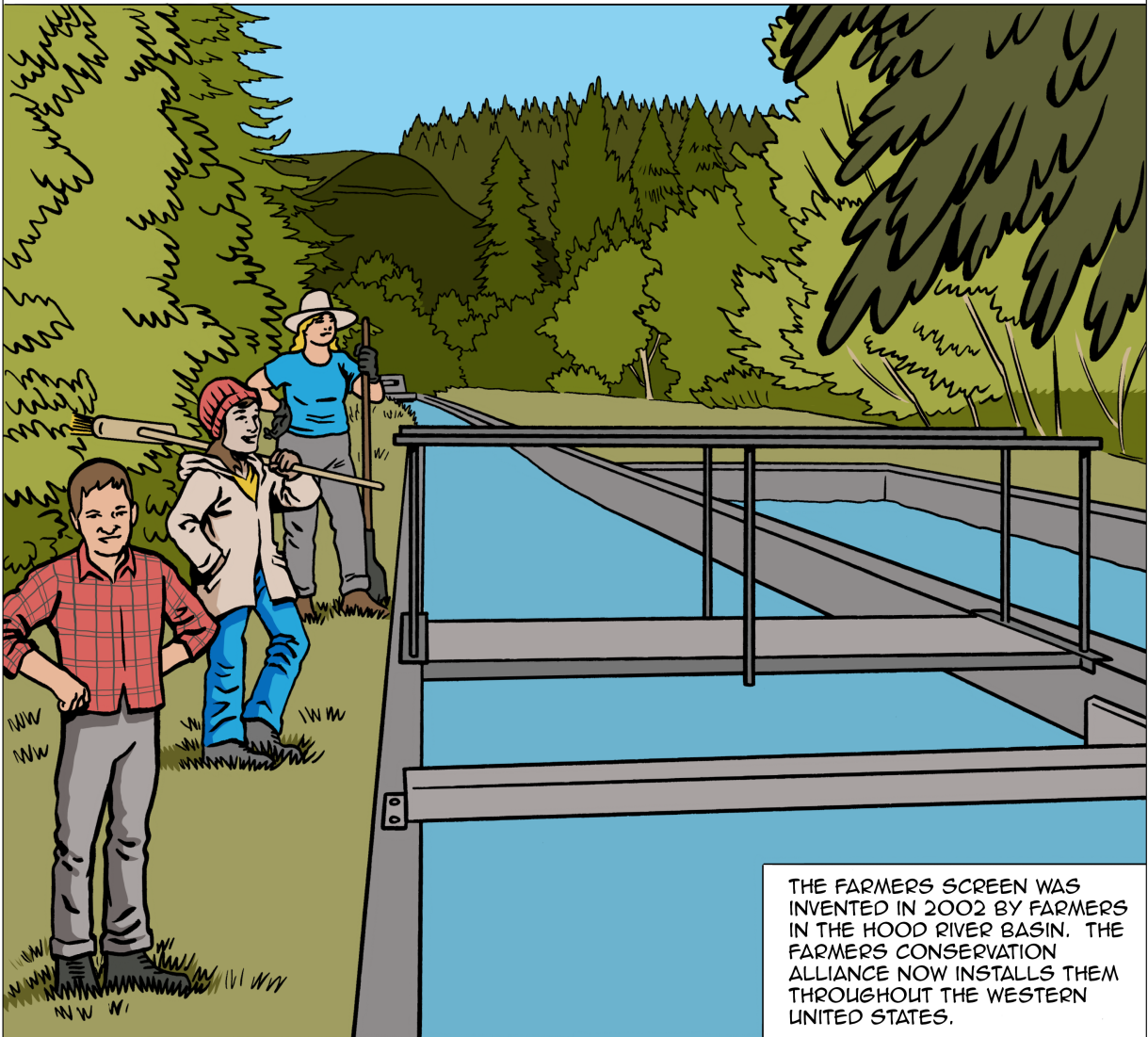
LA PERA

ORCHARDISTS ROUTINELY FOUND PARTS OF YOUNG SALMON OR STEELHEAD WITHIN THE PIPES, PUMPS, SPRINKLERS OR CANALS IRRIGATING THEIR FRUIT TREES. IRRIGATION DISTRICTS COLLABORATE WITH MANY PARTNERS TO INSTALL FISH SCREENS WHICH DECREASE FISH MORTALITY.



I NEVER THOUGHT ABOUT THE IMPACT IRRIGATION HAD ON FISH AND THEIR HABITAT UNTIL LEARNING ABOUT THE HOOD RIVER WATERSHED GROUP AND SPEAKING WITH CINDY & ALIX.

PREVENTABLE SALMON AND STEELHEAD MORTALITY ALONG WITH THEIR 1997 ENDANGERED SPECIES ACT LISTING, LED TO THE CREATION OF THE FARMERS SCREEN, A HORIZONTAL FISH SCREEN THAT FILTERS FISH AND SEDIMENT BACK INTO THE RIVER AND AWAY FROM FIELD IRRIGATION. THIS NEW DESIGN GREATLY REDUCED THE NUMBER OF JUVENILE FISH ENTERING IRRIGATION CANALS.



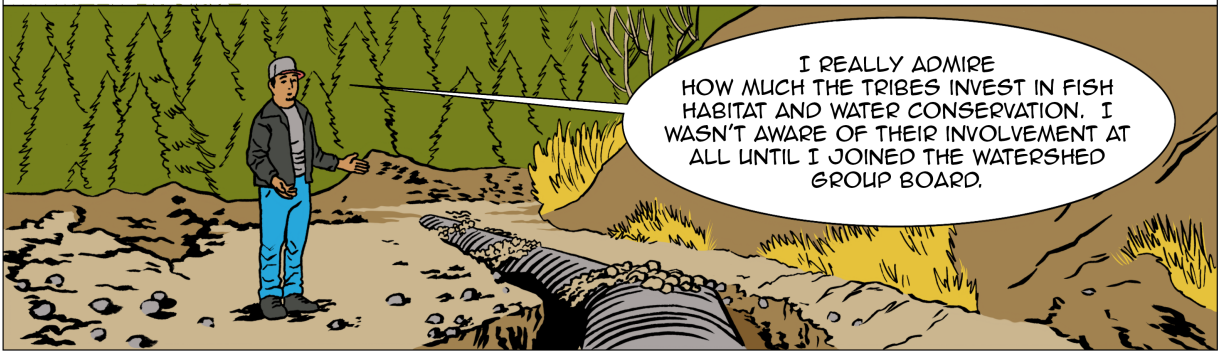
THE FARMERS SCREEN WAS INVENTED IN 2002 BY FARMERS IN THE HOOD RIVER BASIN. THE FARMERS CONSERVATION ALLIANCE NOW INSTALLS THEM THROUGHOUT THE WESTERN UNITED STATES.

THE HOOD RIVER BASIN BENEFITS FROM THE EFFORTS OF PARTNERS MOTIVATED TO FIND THE RIGHT BALANCE BETWEEN THE WATER NEEDS OF ITS TWO BIGGEST USERS-- IRRIGATED AGRICULTURE (FARMS) AND INSTREAM FLOW (FISH).

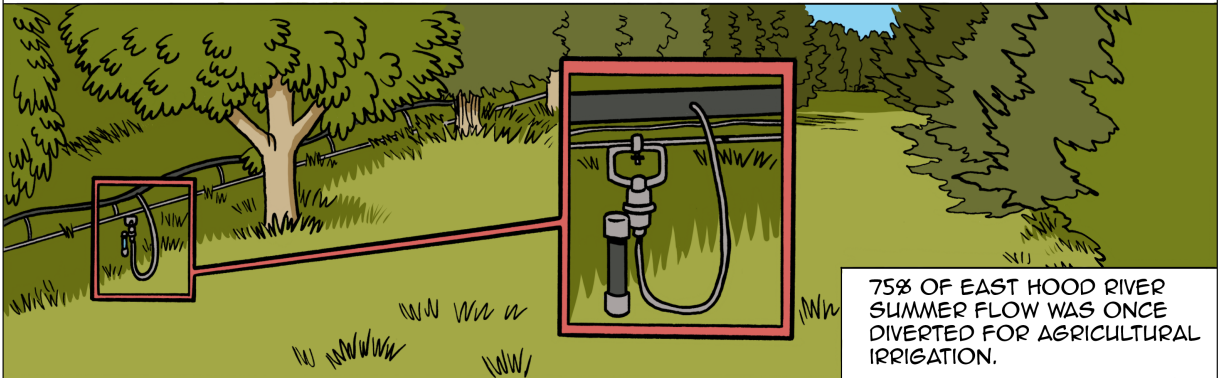


THE HOOD RIVER VALLEY IRRIGATION DISTRICTS (FARMERS, EAST FORK, MIDDLE FORK, DEE & MT HOOD) MANAGE IRRIGATION WATER DELIVERY AND STORAGE WITHIN THE HOOD RIVER WATERSHED.

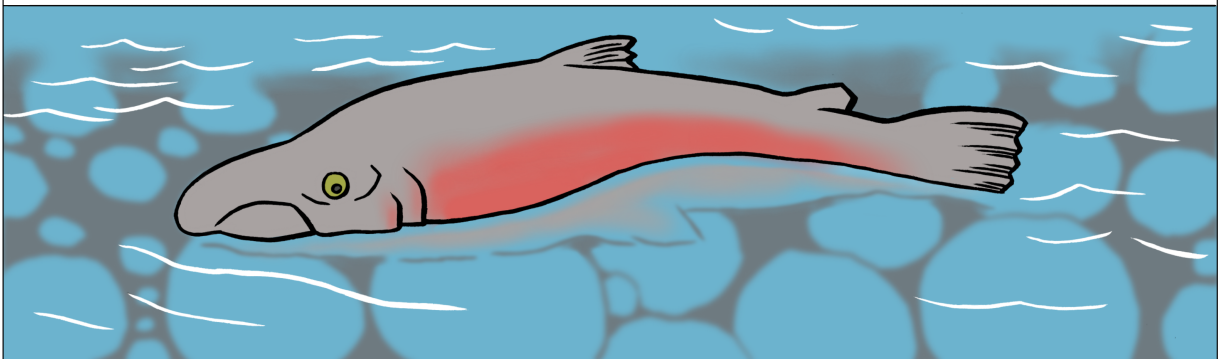
THE WATERSHED GROUP AND THE CONFEDERATED TRIBES OF THE WARM SPRINGS WORK WITH IRRIGATION DISTRICTS TO PIPE THE OPEN CANALS THROUGHOUT THE WATERSHED. THE SOIL AND WATER CONSERVATION DISTRICT WORKS WITH FARMERS TO UPGRADE TO MODERN IRRIGATION SYSTEMS.



THESE PARTNERSHIPS HAVE LED TO THE REPLACEMENT OF OVER 115 MILES OF IRRIGATION CANALS AND THE INSTALLATION OF MICRO AND DRIP SPRINKLERS, EACH PROVIDING SIGNIFICANT WATER SAVINGS.



LOW STREAMFLOW ASSOCIATED WITH WATER DIVERSIONS LIMITS THE AMOUNT AND QUALITY OF HABITAT FOR MANY FISH AND AQUATIC SPECIES. REDUCED WATER FLOW ALSO CAUSES HARMFUL WARM WATER TEMPERATURES.

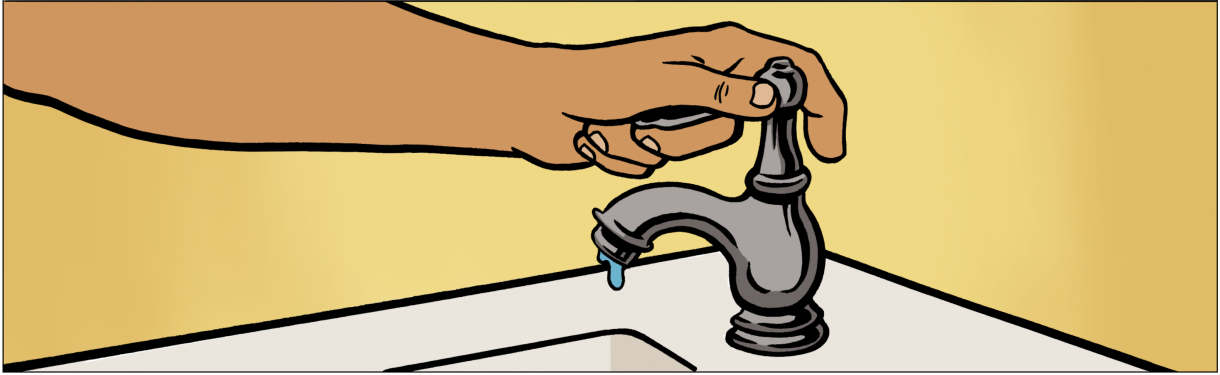


WATER IS A VITAL RESOURCE TO EVERYONE IN THE HOOD RIVER WATERSHED.

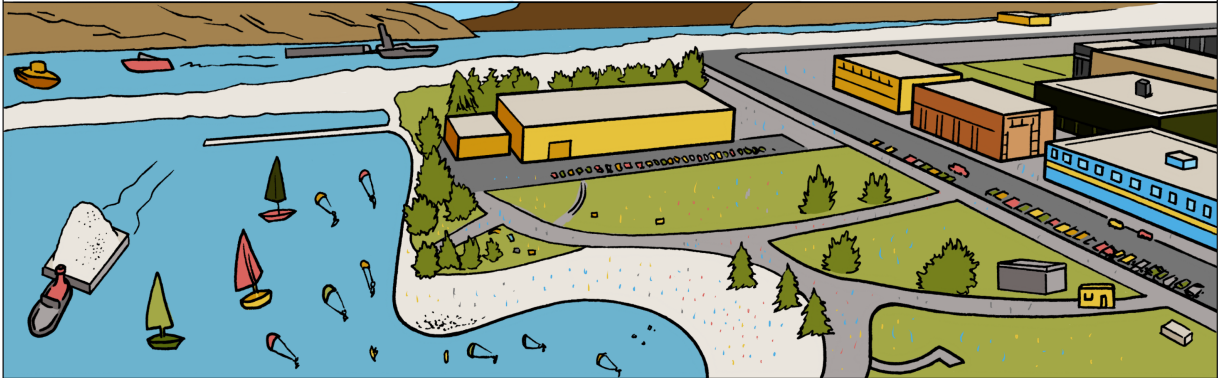
MOUNT HOOD'S GLACIERS HAVE LOST 40% OF THEIR AREA IN THE LAST 20 YEARS

COLD GLACIAL HEADWATERS MAKE THE HOOD RIVER A COLD WATER REFUGE FOR SALMON AND STEELHEAD

SINCE OVER 90% OF RESIDENTIAL AND IRRIGATION WATER COMES FROM THE MT. HOOD GLACIERS, ALL USERS MUST WORK TO IMPLEMENT WATER CONSERVATION PRACTICES.



THE NEED FOR WATER CONSERVATION BECOMES EVEN MORE SALIENT WHEN NOTING THAT HOOD RIVER COUNTY HAS EXPERIENCED A 25% POPULATION GROWTH IN THE PAST THREE DECADES.



THE HOOD RIVER WATERSHED GROUP WILL CONTINUE WITH THEIR CHARGE TO CARE FOR THE FLORA AND FAUNA OF THE RIVER AND ITS HABITAT WHILE BALANCING THE DIVERSE NEEDS OF WATER USERS IN A GROWING COMMUNITY.



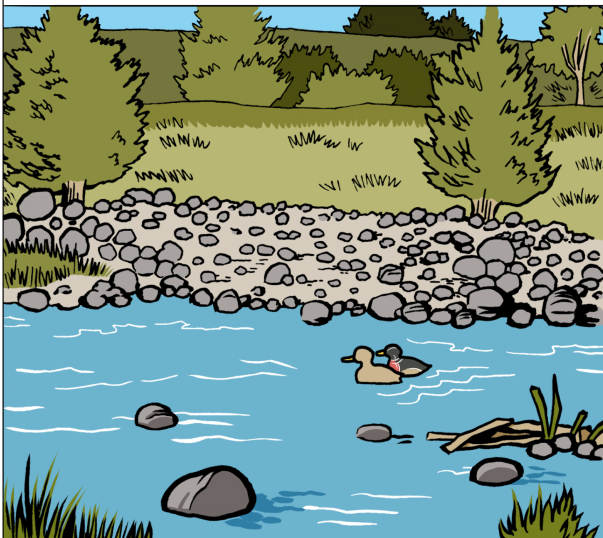
IN 2010, THE POWERDALE DAM WAS REMOVED AFTER AN AUDIT DEMONSTRATED THE COST TO REPLACE THE AGING INFRASTRUCTURE SURPASSED THE VALUE OF THE POWER GENERATED.



THE LOWER HOOD RIVER NOW FLOWS FREELY THROUGH THE 400-ACRE POWERDALE CORRIDOR AFTER THE NEARLY DECADE-LONG COLLABORATIVE EFFORTS OF THE COLUMBIA LAND TRUST, HOOD RIVER COUNTY, HOOD RIVER WATERSHED GROUP, CONFEDERATED TRIBES OF THE WARM SPRINGS AND MANY ADDITIONAL PARTNERS.



THE RIPARIAN VEGETATION IS THRIVING AT THE FORMER DAM SITE.

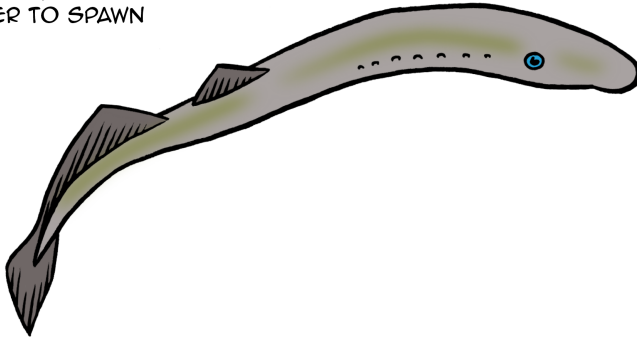


SIDE CHANNEL WETLANDS SUPPORT A HEALTHY HABITAT COMPLETE WITH BEAVERS, WATERFOWL AND SONGBIRDS.

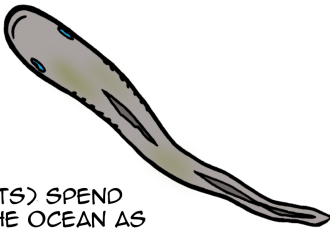


AFTER BEING EXCLUDED FROM THE WATERSHED BY THE POWERDALE DAM FOR ALMOST 100 YEARS, THE TRIBES HAVE CONFIRMED THE REAPPEARANCE OF PACIFIC LAMPREY OR SKWAK' WAL, JAWLESS FISH THAT PREDATE THE DINOSAURS, TO THE HOOD RIVER BASIN,.

ADULTS RETURN TO FRESHWATER TO SPAWN AND DIE



AMMOCOETES (LARVAE) HATCH AND BURROW INTO THE SEDIMENT AND FILTER FEED, REMAINING IN STREAMS FOR 5-7 YEARS



MACROPTHALMIA (SMOLTS) DEVELOP EYES AND A SUCKING APPARATUS BEFORE MIGRATING TO THE OCEAN

LAMPREY (ADULTS) SPEND 2-3 YEARS IN THE OCEAN AS PREDATORS OF FISH, INCLUDING SALMON

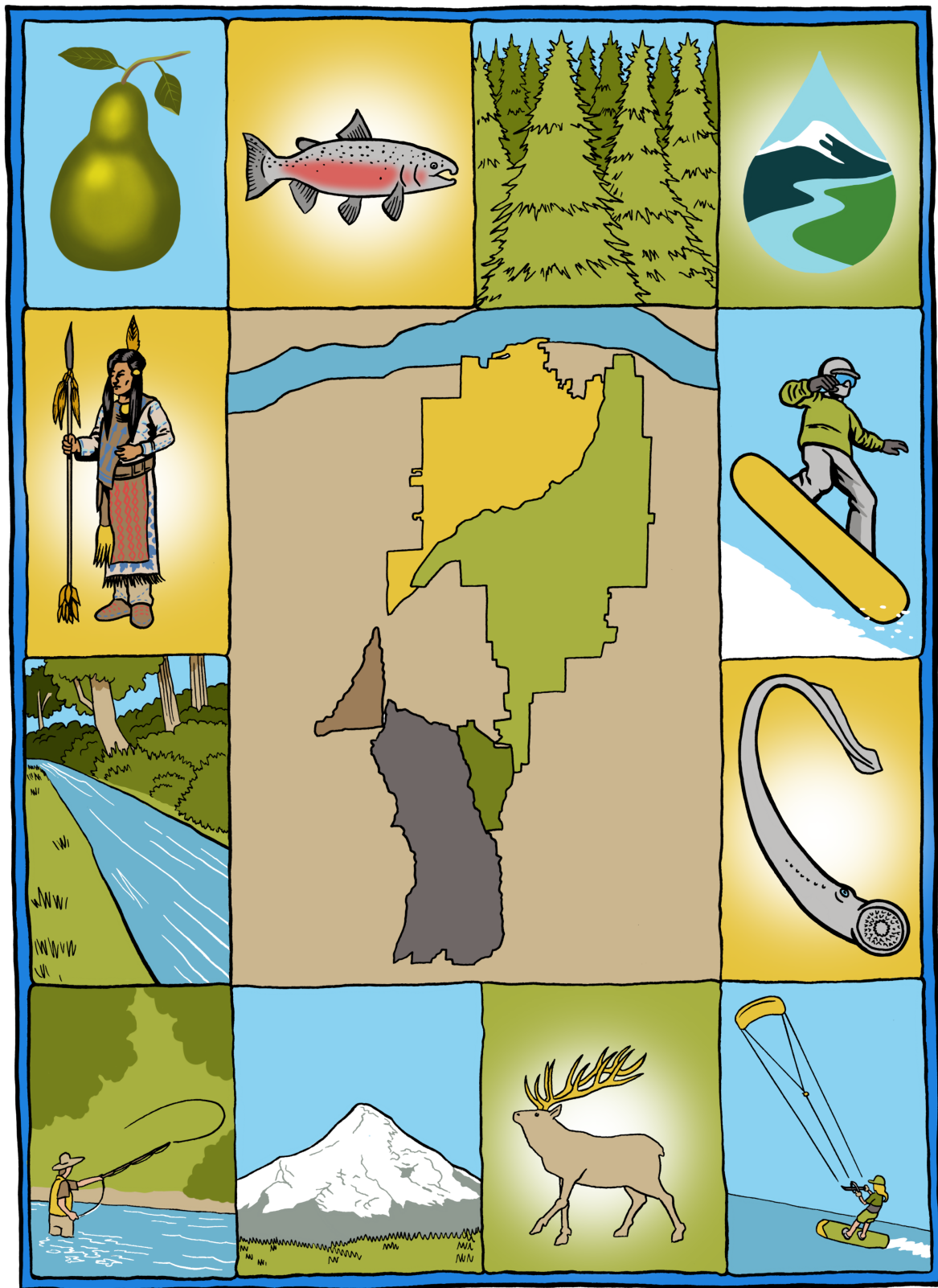
SKWAK' WAL'S CELEBRATED RETURN TO PUNCHBOWL FALLS, THE SITE OF A FORMER SPLASH DAM, WILL ALLOW THE CONFEDERATED TRIBES OF THE WARM SPRINGS TO HARVEST THIS FIRST FOOD FOR THE FIRST TIME IN OVER A CENTURY. A REALITY MADE POSSIBLE BY TRANSFORMING THE POWERDALE DAM INTO THE POWERDALE CORRIDOR.



THE CONFEDERATED TRIBES OF THE WARM SPRINGS ALSO MANAGE A SPRING CHINOOK HATCHERY AND FLUID WATER CONSERVATION AND HABITAT RESTORATION PROJECTS IN THE WATERSHED.



DESCENDANTS OF THE WASCO-WISHRAM TRIBES, SETTLERS, ISSEI, BRACEROS AND MANY OTHERS COALESCE TO CREATE THE PATCHWORK QUILT OF TODAY'S HOOD RIVER VALLEY. EACH FLOURISHES IN THE SHADOWS OF WY'EAST AND PAHTO.



ALL BENEFIT FROM THE STEWARDSHIP EFFORTS OF THE HOOD RIVER WATERSHED GROUP AND PARTNERS.

ABOUT THE AUTHORS



LESLIE KING (AUTHOR) IS A MEDICAL DOCTOR WITH PUBLIC HEALTH AND ENVIRONMENTAL SCIENCES TRAINING WHO HAS PUBLISHED OPEDS, ESSAYS, ARTICLES AND COLUMNS IN NATIONAL PRINT AND ONLINE MEDIA FOR MORE THAN TWO DECADES. SHE COMBINES HER PROFESSIONAL EXPERTISE AND WRITING SKILLS TO CREATE HEALTH AND ENVIRONMENTAL "EXPLAINER COMICS" THAT INVOKE THE POWER OF STORYTELLING TO IMPROVE KNOWLEDGE AND INCREASE UNDERSTANDING OF COMPLEX SOCIETAL ISSUES.



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A SEASONAL ROUND SHOWS THE ANNUAL CYCLE OF FOODS TRADITIONALLY GATHERED OR HUNTED BY TRIBAL MEMBERS. SEASONAL ROUNDS ALSO BEAUTIFULLY ILLUSTRATE HOW TRIBAL TRADITIONS ARE INHERENTLY CONNECTED TO THE WATERSHED AND SERVE AS INSPIRATION AND AWARENESS FOR ALL WATERSHED RESIDENTS.