



# **TERRA LAWSON-REMER**

## **VICE-CHAIR**

**SUPERVISOR, THIRD DISTRICT  
SAN DIEGO COUNTY BOARD OF SUPERVISORS**

### **AGENDA ITEM**

**DATE: October 8, 2024**

**TO: Board of Supervisors**

#### **SUBJECT**

**DECLARING THE TIJUANA RIVER VALLEY AN EPA SUPERFUND SITE TO UNLOCK STATE AND FEDERAL FUNDS FOR TOXIC REMEDIATION AND CLEAN-UP (DISTRICTS: ALL)**

#### **OVERVIEW**

For nearly eight decades, the Tijuana River Valley has been drowning in toxic chemicals, industrial waste, and raw sewage flowing across the border, wreaking havoc on our health, environment, and economy. Despite recent progress on infrastructure and binational cooperation, the hazardous waste continues to flow and at great cost to the public. Public health is at risk. Our ecosystems are suffering. The regional economy is feeling the strain.

While immediate repairs—like wastewater pumps in Tijuana and upgrades to the South Bay International Wastewater Treatment Plant—are critical, they simply aren’t happening fast enough. And, even when completed, infrastructure alone won’t undo the impact of decades of relentless toxic pollution that includes heavy metals and hazardous chemicals, some of which have been banned in the United States such as DDT, and Polychlorinated Biphenyls (PCBs), as well as other cancer-causing industrial compounds like hexavalent chromium and polycyclic aromatic hydrocarbons (PAHs)<sup>iii</sup>.

Everyone deserves access to clean water and healthy open spaces free from dangerous contaminants. Stopping the sewage is an important first step but cleaning up the hazardous waste in the river valley and estuary will be one of the most daunting environmental justice challenges of our times.

#### **What is a Superfund Site?**

I’m calling on the County of San Diego to petition the U.S. Environmental Protection Agency (EPA) to designate the 6-mile portion of the Lower Tijuana River Valley as a “Superfund” site to

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unlock federal funding and clean-up the toxic conditions. The Superfund program requires the nation’s most toxic hazardous waste sites to be identified and cleaned up. The Superfund designation provides authority and funding to remediate pollution, hold responsible parties accountable, while centering communities in the process. Superfund is designed to addresses toxic waste and not raw sewage, which falls under the jurisdiction of the Clean Water Act. However, the Tijuana River Valley has endured 80 years of wastewater spills that includes many known toxic substances, making it a strong candidate for Superfund designation.



*Photo: Ana Ramirez/The San Diego Union-Tribune*

**Benefits of Superfund Designation**

Being listed as a Superfund site offers several key benefits. First, it provides access to federal funding for site investigation, cleanup, and long-term remediation. In 2022, President Biden reinstated the Petroleum Superfund Tax, which will raise an additional \$52 billion over the next 10 years to support Superfund cleanup activities. We must ensure San Diego County receives its fair share of these resources. Second, Superfund designation guarantees the creation of a comprehensive cleanup plan that addresses all hazardous contaminants in detail, safeguarding public health and the environment by significantly reducing exposure to dangerous pollutants.

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Third, the Superfund program holds responsible parties accountable, ensuring polluters contribute to the cleanup costs.

### **Why Tijuana River Should be a Superfund Site**

The Tijuana River wastewater crisis is too often viewed solely as a sewage issue, but it's far more complex. For decades, the wastewater flow carries toxic contaminants, heavy metals, pesticides, herbicides, and other hazardous substances, making it a much broader environmental threat. A 2024 study<sup>iii</sup> found 170 pollutants in the river sediment, including polycyclic aromatic hydrocarbons (PAHs), a carcinogen that affects development, liver, and reproductive systems<sup>iv</sup>, and banned pesticides such as DDT. The Regional Water Quality Control Board found 7 substances that exceeded human health thresholds including PAH concentrations that were “consistent with pollution caused by industrial discharges and urban runoff<sup>v</sup>”.

Since the 1990s, the river and its tributaries have been plagued by illegal dumping from industrial sites, including from maquiladoras, foreign-owned manufacturing plants known for their lax environmental practices. The toxic legacy of these illegal wastewater discharges persists, buried deep in the sediments of the riverbed.

The EPA employs a standardized Hazard Ranking System (HRS) to evaluate and determine whether a site qualifies for Superfund designation. The HRS assesses three categories of risk and examines four pathways through which contaminants can threaten public and environmental health.

#### **1. Waste Characteristics (toxicity, quantity of hazardous substances):**

- A 2018 study<sup>vi</sup> by U.S. Customs and Border Protection found high concentrations of many hazardous substances above EPA standards, including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, herbicides, and bacteria. This includes many known carcinogens and toxic substances like hexavalent chromium, arsenic, DDT, and lead.
- A 2020 study by the IBWC<sup>vii</sup> showed high levels of chemical, metals, and oils, including copper, nickel, and zinc, commonly used in the metal plating industry, as well as organic compounds like DEHP, which a chemical leached from plastics.
- A 2024 San Diego State University Public Health Report<sup>viii</sup> noted 392 chemical contaminants in the Tijuana River, including 175 compounds that are listed in the U.S. EPA Toxic Substances Control Act, such as acetone, pesticides, flame retardants, DDT, and PCBs. The report also found elevated levels of arsenic and all study sites.

#### **2. Likelihood of release of hazardous substances**

- Hazardous substances in the sediment and water could be released due to ongoing erosion, water flow disturbances, and flooding, which can dislodge and mobilize toxic contaminants embedded in the riverbed, leading to increased environmental and public health risks.

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- Culverts along the Tijuana River (Saturn Blvd) agitate and churn the water, increasing the likelihood of toxic substances being released and aerosolized, potentially exposing nearby communities to airborne contaminants. Recent data<sup>ix</sup> has shown elevated levels of hydrogen sulfide near the river and in the adjacent community.

**3. People or Sensitive Environments Affected by Release**

- The Tijuana River flows through urbanized neighborhoods, including ranches, farms, and single-family homes, making these environmental justice communities particularly sensitive to potential contamination and vulnerable to the public health risks posed by ongoing pollution.
- The river also terminates in the Tijuana River National Estuarine Reserve and the Tijuana Slough National Wildlife Reserve. This is the largest wetland in Southern California and is a home to over 370 bird species including 6 federally listed threatened or endangered species<sup>x</sup>.

<b>Air Migration Pathway</b>	Research from San Diego State University and UC San Diego highlight the elevated levels of hydrogen sulfide near the river and in the adjacent communities. More research is being conducted to analyze other airborne contaminant such as VOCs.
<b>Ground Water Migration Pathways</b>	Ranches and farms adjacent the Tijuana River utilize well water, often from wells potentially as shallow as 15 ft deep. Contaminants in the river could form a groundwater plum leaching liquid contaminants into the soil or aquifer.
<b>Surface Water Migration Pathway</b>	<p>Ranches, farms, community gardens, and commercial nurseries are all found within several hundred yards of the river, potentially exposing food, plant stock and livestock sources to contamination.</p> <p>The Tijuana River also flows directly into the Tijuana Slough National Reserve, a sensitive ecosystem that is home to the largest wetland in southern California and endangered species. The Tijuana River Estuary has been designated a Ramsar Convention Wetland of International Important, a National Estuarine Research Reserve, and a Critical Coastal Area (CCA) and is adjacent to the Tijuana River Mouth State Marine Conservation Area. The river valley support 11 habitat types and either threatened or endangered species.</p>
<b>Soil Migration Pathway</b>	The dry, dusty conditions in the Tijuana River Valley heighten the potential for soil migration, allowing contaminants to be carried by wind over long distances, sometimes traveling miles and exposing surrounding communities and ecosystems to harmful pollutants.

Today’s action directs County staff to formally petition the EPA to conduct a preliminary assessment and site inspection of the Lower Tijuana River Valley for inclusion in the EPA Superfund program and placement on the National Priorities List. This is the first step in fast-tracking hazardous waste cleanup and holding polluters accountable. The petition should highlight

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that the Tijuana River crisis involves toxic chemicals and hazardous substances, not merely raw sewage, underscoring the environmental and public health risks posed by long-standing industrial and chemical pollution.

This item also aims to center the voices of impacted individuals and community-based leaders, inviting the public to join the County's petition as official co-signers and to share their testimony and experiences of how they are affected by the potential release of toxic contaminants. It's time to decisively act to make our communities whole, safeguard public health, and secure a more sustainable future for generations to come.

**RECOMMENDATION(S)**

**VICE CHAIR TERRA LAWSON-REMER**

1. Direct the Chief Administrative Officer to submit a petition to the U.S Environmental Protection Agency (EPA) to conduct a preliminary assessment and site inspection of the Lower Tijuana River Valley for inclusion on EPA's National Priorities List to determine if the Tijuana River Valley would qualify for federal assistance under the Superfund program. The petition should include discussion of potential and known releases of toxic substances, beyond raw sewage, that best align with Superfund criteria.
2. Direct the Chief Administrative Officer to open a 14-day period to solicit partners, individuals, and impacted communities to join the County of San Diego's petition to the EPA as official co-signers and to submit testimony, pictures, evidence, and personal experiences how they are affected by the release or potential release of toxic contaminants in the Tijuana River Valley, which would be included as an appendix to the petition.
3. Direct the Chief Administrative Office to create an urgent public communications campaign to stakeholder groups in the affected coastal communities, from North County to the border to inform them of the County's effort to pursue Superfund designation for the Tijuana River Valley and solicit co-signers in support of Recommendation 3 above.
4. Direct the Chief Administrative Officer to report back to the Board with a memo, that includes the official petition submitted to EPA, with information such the names of the co-signers, their zip code, and their submitted testimony, as applicable.

**EQUITY IMPACT STATEMENT**

Many of the communities most impacted by the Tijuana River transboundary pollution are identified by SB 535 (2012) and on CalEnviroScreen 4.0 Environmental Justice community as having high pollution burdens from impaired water bodies, elevated PM2.5 levels and elevated levels of linguistic isolation and poverty rates.

**SUSTAINABILITY IMPACT STATEMENT**

This board letter aligns with the County's sustainability goals to protect the environment and promote our natural resources, diverse habitats, and cultivate a natural environment for residents, visitors, and future generations to enjoy. It also aligns with County Sustainability goals, including:

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(4): Protect the health and wellbeing of everyone in the region, with a focus on collaborating with community partners and advocating for environmental justice for communities that have been disproportionately impacted (5): Protect water in all forms. (6): Develop natural and organic land management policies and practices that protect ecosystems, habitats, biodiversity, and soil health throughout the County while providing opportunities for all residents to access and enjoy the outdoors, and (7): Reduce pollution and waste and demonstrate reduction in consumption of resources.

**FISCAL IMPACT**

There is no fiscal impact associated with these recommendations. There will be no change in net General Fund cost and no additional staff years.

**BUSINESS IMPACT STATEMENT**

The impact of beach closures has a devastating impact on coastal communities through decreased visitors and street traffic. The long-term health impact of chronic exposure to transboundary pollutants and chemicals may also have significant impacts on economic growth and flourishing of communities across San Diego County.

**ADVISORY BOARD STATEMENT**

N/A

**BACKGROUND**

For nearly eight decades, the Tijuana River Valley has been drowning in toxic chemicals, industrial waste, and raw sewage flowing across the border, wreaking havoc on our health, environment, and economy. Despite recent progress on infrastructure and binational cooperation, the pollution continues to flow and at great cost to the public. Public health is at risk. Our ecosystems are suffering. The regional economy is feeling the strain.

While immediate repairs—like wastewater pumps in Tijuana and upgrades to the South Bay International Wastewater Treatment Plant—are critical, they simply aren’t happening fast enough. And, even when completed, infrastructure alone won’t undo the impact of decades of relentless pollution that mixes sewage with toxic chemicals including arsenic, cadmium, banned pesticides such as DDT, and dangerous industrial compounds like hexavalent chromium<sup>xi</sup>.

Everyone deserves access to clean water and healthy open spaces free from dangerous contaminants. Stopping the pollution is an important first step but cleaning up the river valley will be one of the most daunting environmental justice challenges of our times and we need to enlist federal assistance.

**What is a Superfund Site?**

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I'm calling on the County of San Diego to petition the U.S. Environmental Protection Agency (EPA) to designate the 6-mile portion of the Lower Tijuana River Valley as a "Superfund" site to unlock federal funding and clean-up the toxic conditions. The Superfund designation is given to the most toxic and polluted sites in America, such as abandoned mines and contaminated waterways, and provides authority and funding to remediate pollution, hold responsible parties accountable, while centering communities in the process. The Superfund program primarily addresses toxic waste, while raw sewage falls under the jurisdiction of the Clean Water Act and other regulations. The Tijuana River Valley has endured 80 years of wastewater that includes many known toxic substances, making it a strong candidate for Superfund designation.

There are over 1,300 EPA-designated Superfund sites across the nation, including 114 in California, and one (Camp Pendleton Marine Base) in San Diego County. The process of getting Superfund designation can be lengthy, making it essential to begin this process as soon as possible to access the resources we need to achieve meaningful progress.

### **Benefits of Superfund Designation**

Being listed as a Superfund site offers several key benefits. First, it provides access to federal funding for site investigation, cleanup, and long-term remediation efforts. In 2022, President Biden reinstated the Petroleum Superfund Tax, which will raise an additional \$52 billion over the next 10 years to support Superfund cleanup activities. We must ensure San Diego County receives its fair share of these resources. Second, Superfund designation guarantees the creation of a comprehensive cleanup plan that addresses all hazardous contaminants in detail, safeguarding public health and the environment by significantly reducing exposure to dangerous pollutants. The EPA provides technical expert oversight, ensuring the cleanup follows strict safety and environmental standards. Third, the Superfund program holds responsible parties accountable, ensuring polluters contribute to the cleanup costs. Finally, Superfund cleanup efforts help restore the surrounding community and property values, making the area safer and more livable for residents.

### **Process of Superfund Designation**

1. **Petition to EPA for an Assessment:** any person or organization can petition the EPA to conduct a Preliminary Assessment if they suspect a site may pose a risk.
2. **Preliminary Assessment:** The EPA conducts an initial desk review looking at existing data and literature to determine how much risk is posed to the environment or the public to determine if a Site Inspection is warranted.
3. **Site Inspection:** If the Preliminary Assessment recommends further investigation a site inspection is performed. It is more comprehensive and includes significant sample collection and testing to determine the types and concentrations of pollutants present at the site and how far they have spread. This data is used to score the site using the Hazardous Ranking System.

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4. **Hazardous Ranking System:** The data from the site inspection is inputted into the Hazardous Ranking System that uses a standardized mathematical algorithm to score the site from 0-100 based on risk factors:
  - Waste characteristics (e.g. toxicity and waste quantity),
  - Likelihood that a site has released or has the potential to release hazardous substances into the environment,
  - People or sensitive environments (targets) affected by the release.
 These risk factors are considering for four potential contamination pathways:
  - Ground water migration (drinking water),
  - Surface water migration (drinking water, human food chain, sensitive environments),
  - Soil exposure and subsurface intrusion (population, sensitive environments),
  - Air migration (population, sensitive environments).
5. **National Priorities List (aka Superfund Designation):** If the site scores 28.5 or higher on the HRS, it will be proposed for inclusion on the National Priorities List, making the site eligible to develop a remediation plan and receive Superfund resources.

**Why Tijuana River Should be a Superfund Site**

The Tijuana River wastewater crisis is too often viewed solely as a sewage issue, but it's far more complex. The wastewater flow also carries toxic contaminants, heavy metals, pesticides, herbicides, and other hazardous substances, making it a much broader environmental threat. For example, maquiladoras, or foreign-owned manufacturing plants in Tijuana, are known for lax environmental practices and illegal discharges of industrial waste into the regional wastewater system. One study found that wastewater in Tijuana contains 10x more chromium, 8x more nickel, and 3x more copper than that of San Diego<sup>xii</sup>. The toxic legacy of decades of these illegal wastewater discharges persists, buried deep in the sediments in the Tijuana Riverbed. Fixing the sewage infrastructure won't make this problem go away.

The EPA employs a standardized Hazard Ranking System (HRS) to evaluate and determine whether a site qualifies for Superfund designation. The HRS assesses three categories of risk and examines four pathways through which contaminants can threaten public and environmental health.

Superfund Criteria	Tijuana River Valley Applicability
Waste Characteristics	A 2018 study <sup>xiii</sup> by U.S. Customs and Border Protection found high concentrations of many hazardous substances above EPA standards, including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, herbicides, and bacteria. This includes many known



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carcinogens and toxic substances like hexavalent chromium, arsenic, DDT, and lead.

Volatile Organic Compounds					
Analyte	Highest Concentration (µg/L)	EPA Regional Screening Level (tapwater) (µg/L)	Location	Date	Event Type
Bromodichloromethane	2.3	0.13	Goat Canyon	5/30/2018	Wet Weather - Baseline
Chloroform	2.2	0.22	Goat Canyon	5/30/2018	Wet Weather - Baseline
Dibromochloromethane	5	0.87	W-4	4/19/2018	Wet Weather - Baseline
1,4-Dichlorobenzene	5.3	0.48	Stewart's Drain	2/27/2018	Rain Event
Trichloroethene	1.4	0.49	Stewart's Drain	2/27/2018	Rain Event
Bromoform	14	3.3	W-4	2/26/2018	Wet Weather - Baseline

Semi-Volatile Organic Compounds					
Analyte	Highest Concentration (µg/L)	EPA Regional Screening Level (tapwater) (µg/L)	Location	Date	Event Type
Bis(2-ethylhexyl) phthalate	25	5.6	Goat Canyon	5/30/2018	Wet Weather - Baseline
1,2-Diphenylhydrazine	0.54	0.078	Stewart's Drain	6/21/2018	Wet Weather - Baseline
Benzidine	49	0.00011	Goat Canyon	2/23/2018	Wet Weather - Baseline

Metals					
Analyte	Highest Concentration (µg/L)	EPA Regional Screening Level (tapwater) (µg/L)	Location	Date	Event Type
Uranium	30	4	W-4	02/26/2018, 04/16/2018	Wet Weather - Baseline
Cyanide, Total	5.4	1.5	Stewart's Drain	1/24/2018	Wet Weather - Baseline
Arsenic	37	0.052	Yogurt Canyon Road	1/28/2018	Wet Weather - Baseline
Chromium	110	100	Yogurt Canyon Road	1/28/2018	Wet Weather - Baseline
Cobalt	45	6	Yogurt Canyon Road	1/28/2018	Wet Weather - Baseline
Manganese	3900	430	Yogurt Canyon	6/22/2018	Pooled water
Vanadium	310	86	Yogurt Canyon Road	1/28/2018	Wet Weather - Baseline
Iron	110000	14000	Yogurt Canyon Road	1/28/2018	Wet Weather - Baseline
Aluminum	72000	20000	Yogurt Canyon Road	1/28/2018	Wet Weather - Baseline
Antimony	22	7.8	Stewart's Drain	1/25/2018	Wet Weather - Baseline
Lead	75	15	Smuggler's Gulch	3/17/2018	Rain Event
Hexavalent Chromium	40	0.035	Stewart's Drain	6/21/2018	Wet Weather - Baseline

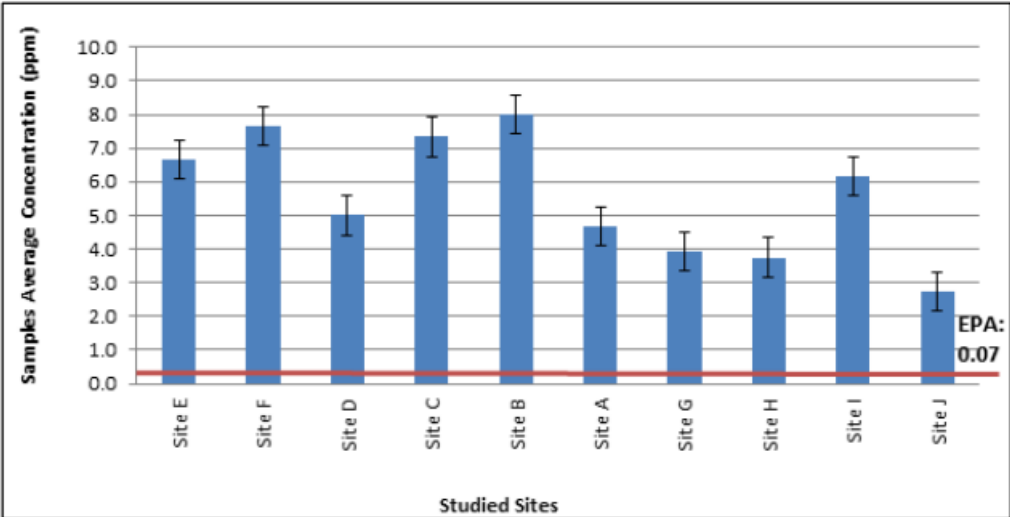
Pesticides					
Analyte	Highest Concentration (µg/L)	EPA Regional Screening Level (tapwater) (µg/L)	Location	Date	Event Type
4,4'-DDD	0.031	0.032	Smuggler's Gulch	2/23/2018	Rain Event
4,4'-DDT	0.27	0.23	Smuggler's Gulch	2/23/2018	Rain Event
Aldrin	0.014	0.00092	Canyon Del Sol	2/27/2018	Rain Event

Herbicides					
Analyte	Highest Concentration (µg/L)	EPA Regional Screening Level (tapwater) (µg/L)	Location	Date	Event Type
MCPP	770	16	Stewart's Drain	1/24/2018	Wet Weather - Baseline
MCPA	240	7.5	Stewart's Drain	5/31/2018	Wet Weather - Baseline

Biological								
Type	Locations							San Diego Region Basin Plan Water Quality Objectives (Contact Recreational Values)
	GC	RYC	SD	SG	YC	W4	CDS	
Average Total coliform (MPN/100 mL)	1891379	242000	2179909	1767000	401393	1106756	2420000	1000
Average E. coli (MPNU/100 mL)	1715127	1550000	1652636	1648333	587	274675	2420000	200
Average Enterococcus (MPN/100 mL)	860600	160000	929091	660000	1481	561411	500000	33

GC: Goat Canyon RYC: Road at Yogurt Canyon SD: Stewart's Drain SG: Smuggler's Gulch YC: Yogurt Canyon W4: Main channel west of concrete apron CDS: Canyon del Sol

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	<p>A 2020 study by the IBWC<sup>xiv</sup> showed high levels of chemical, metals, and oils, including copper, nickel, and zinc, commonly used in the metal plating industry, as well as organic compounds like DEHP, which a chemical leached from plastics.</p> <p>A 2024 San Diego State University Public Health Report<sup>xv</sup> noted 392 chemical contaminants in the Tijuana River, including 175 compounds that are listed in the U.S. EPA Toxic Substances Control Act. The report noted elevated levels of arsenic and all study sites (below).</p>  <table border="1" data-bbox="451 625 1455 1138"> <caption>Data for Figure 3: Average concentrations of arsenic found at study sites</caption> <thead> <tr> <th>Site</th> <th>Average Concentration (ppm)</th> </tr> </thead> <tbody> <tr><td>Site E</td><td>~6.8</td></tr> <tr><td>Site F</td><td>~7.8</td></tr> <tr><td>Site D</td><td>~5.0</td></tr> <tr><td>Site C</td><td>~7.5</td></tr> <tr><td>Site B</td><td>~8.0</td></tr> <tr><td>Site A</td><td>~4.8</td></tr> <tr><td>Site G</td><td>~4.0</td></tr> <tr><td>Site H</td><td>~3.8</td></tr> <tr><td>Site I</td><td>~6.2</td></tr> <tr><td>Site J</td><td>~2.8</td></tr> </tbody> </table> <p><i>Figure 3. Average concentrations of arsenic found at study sites in Los Laureles Canyon and TJRE, A-F are sites in Mexico and G-J are sites in the U.S., n=22<sup>54</sup></i></p>	Site	Average Concentration (ppm)	Site E	~6.8	Site F	~7.8	Site D	~5.0	Site C	~7.5	Site B	~8.0	Site A	~4.8	Site G	~4.0	Site H	~3.8	Site I	~6.2	Site J	~2.8
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Site J	~2.8																						
<p><b>Likelihood of release of hazardous substances</b></p>	<p>Untreated wastewater has flowed through the river valley, potentially depositing contaminants into the river sediment. Culverts along the Tijuana River agitate and churn the water, increasing the likelihood of toxic substances being released and aerosolized, potentially exposing nearby communities to airborne contaminants. Recent data has shown elevated levels of hydrogen sulfide near the river and in the adjacent community, sparking concerns from community members and action from the Air Pollution Control District to increase monitoring and surveillance data.</p>																						
<p><b>People or Sensitive Environments Affected by Release</b></p>	<p>The Tijuana River flows through urbanized neighborhoods, including ranches, farms, and single-family homes, making these environmental justice communities particularly sensitive to potential contamination and vulnerable to the health risks posed by ongoing pollution</p> <p>The Tijuana River flows directly into the Tijuana Slough National Reserve, a sensitive ecosystem that is home to the largest wetland in southern California and endangered species. The Tijuana River Estuary has been designated a Ramsar Convention Wetland of International Important, a National Estuarine Research Reserve, and a Critical Coastal Area (CCA) and is adjacent to the Tijuana River</p>																						

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	Mouth State Marine Conservation Area. The river valley support 11 habitat types and either threatened or endangered species.
<b>Air Migration Pathway</b>	Research from San Diego State University and UC San Diego highlight the elevated levels of hydrogen sulfide near the river and in the adjacent communities. More research is being conducted to analyze other airborne contaminant such as VOCs.
<b>Ground Water Migration Pathways</b>	Ranches and farms adjacent the Tijuana River utilize well water, often from wells as shallow as 15 ft deep. Contaminants in the river could form a groundwater plum leching liquid contaminants into the soil or aquifer.
<b>Surface Water Migration Pathway</b>	<p>Ranches, farms, community gardens, and commercial nurseries are all found within several hundred yards of the river, potentially exposing food, plant stock and livestock sources to contamination.</p> <p>The Tijuana River also flows directly into the Tijuana Slough National Reserve, a sensitive ecosystem that is home to the largest wetland in southern California and endangered species. The Tijuana River Estuary has been designated a Ramsar Convention Wetland of International Important, a National Estuarine Research Reserve, and a Critical Coastal Area (CCA) and is adjacent to the Tijuana River Mouth State Marine Conservation Area. The river valley support 11 habitat types and either threatened or endangered species</p>
<b>Soil Migration Pathway</b>	The dry, dusty conditions in the Tijuana River Valley heighten the potential for soil migration, allowing contaminants to be carried by wind over long distances, sometimes traveling miles and exposing surrounding communities and ecosystems to harmful pollutants.

**Superfund Site Examples**

Similar rivers and water bodies have successfully secured Superfund status, demonstrating the program's effectiveness.

**Upper Columbia River (Washington State):** The Upper Columbia River Superfund site is a similar case of cross-border pollution, where decades of industrial waste from the Teck Cominco smelter in British Columbia, Canada, flowed downstream and across the border to contaminate communities along 150-miles of the Upper Columbia River in northeastern Washington. Toxic substances like lead, arsenic, and mercury were discharged into the river, affecting downstream ecosystems and communities posing serious environmental and public



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health risks. This prompted the Colville Confederated Tribes to petition the EPA to conduct a preliminary assessment in 1999. The EPA entered into a settlement agreement with the responsible party polluter in 2006, securing over \$170 million from Teck Metals to pay for studies and clean-up activities. In March 2024, the EPA proposed formally designation as a Superfund site to access federal dollars and speed up remediation.

**Lower Duwamish Waterway (Seattle):** The Lower Duwamish Waterway Superfund site is in Seattle, Washington, and encompasses a 5.5-mile stretch of the Duwamish River, which flows through an industrialized area and into the mouth of the Duwamish river estuary. Like the Tijuana River estuary, this sensitive ecosystem is where saltwater and freshwater mix, creating habitat for shorebirds, fish, and endangered species. Like the Tijuana River, the site has been heavily contaminated by hazardous substances, including polychlorinated biphenyls (PCBs), arsenic, and polycyclic aromatic hydrocarbons (PAHs) chemicals, primarily resulting from decades of industrial discharges, combined sewer overflows, and stormwater runoff.



The site received Superfund designation in 2001. By 2015, 50% of the PCB contamination in the river bottom was removed in early clean-up actions. In 2024, the EPA forced chemical giant Monsanto to pay \$160 million to fund clean-up efforts for their part in producing highly toxic PCBs that pose a risk to people and wildlife.

**Gowanus Canal (New York City):** This 1.8-mile waterway was polluted by over a century of raw sewage from combined sewage overflows (CSOs), mixed with legacy industrial waste and heavy metals. It runs through a highly urbanized environmental justice community with a population of over 100,000 residents. The canal receives 360 million gallons of CSO discharge each year, roughly one-tenth the amount of raw sewage that flows through the Tijuana River. In 2008, New York State petitioned the EPA to investigate the site and in 2010 it received Superfund designation, which spurred a \$1 billion EPA funded clean-up effort that is slated to continue through 2030.



### **Taking Action**

Today's action directs County staff to petition the EPA to conduct an assessment and site inspection of the Lower Tijuana River Valley for inclusion in the EPA Superfund program and



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placement on the National Priorities List. This is the first step in fast-tracking hazardous waste cleanup and holding polluters accountable. The petition should highlight that the Tijuana River crisis involves toxic chemicals and hazardous substances, not merely a sewage issue, underscoring the broader environmental and public health risks posed by long-standing industrial and chemical pollution.

This item also calls on the County to open a 14-day period to seek co-signers to the petition, soliciting local partners, individual, and impacted communities the join the county as official co-signers to the petition, and submit testimony and evidence of how they are affected by the release, or potential release, of toxic contaminants. It's time to decisively act to make our communities whole, safeguard public health, and secure a more sustainable future for generations to come.

### **LINKAGE TO THE COUNTY OF SAN DIEGO STRATEGIC PLAN**

Today's proposed actions support Sustainability and Equity initiatives in the County's 2024-29 Strategic Plan by combatting environmental justice, health, and economic issues resulting from the long-standing transboundary pollution.

Respectfully submitted,



TERRA LAWSON-REMER  
Supervisor, Third District

**ATTACHMENT(S)**  
N/A

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<sup>i</sup> Joshua Emerson Smith. (2019, February 13). *Banned pesticides and industrial chemicals found flowing from Tijuana into San Diego*. San Diego Union-Tribune; San Diego Union-Tribune. <https://www.sandiegouniontribune.com/2019/02/13/banned-pesticides-and-industrial-chemicals-found-flowing-from-tijuana-into-san-diego/?clearUserState=true>

<sup>ii</sup> *Surface Water Ambient Monitoring Program (SWAMP) Report on the Tijuana Hydrologic Unit*. (2008). [https://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/527\\_TijuanaHU\\_Report.pdf](https://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/527_TijuanaHU_Report.pdf)

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<sup>iii</sup> McLamb, Flannery, et al. "Evidence of Transboundary Movement of Chemicals from Mexico to the U.S. In Tijuana River Estuary Sediments." *Chemosphere*, vol. 348, 1 Jan. 2024, p. 140749, pubmed.ncbi.nlm.nih.gov/38000551/, <https://doi.org/10.1016/j.chemosphere.2023.140749>.

<sup>iv</sup> *Polycyclic Aromatic Hydrocarbons (PAHs) | Toxic Substances | Toxic Substance Portal | ATSDR*. (n.d.). [Www.cdc.gov. https://www.cdc.gov/TSP/substances/ToxSubstance.aspx?toxid=25](https://www.cdc.gov/TSP/substances/ToxSubstance.aspx?toxid=25)

<sup>v</sup> *Surface Water Ambient Monitoring Program (SWAMP) Report on the Tijuana Hydrologic Unit*. (2008). [https://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/527\\_TijuanaHU\\_Report.pdf](https://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/527_TijuanaHU_Report.pdf)

<sup>vi</sup> Patrol, U., & Sector, S. (2019). *Tijuana Wastewater Flows- Impact on CBP Operations Overview and Status Briefing*. [https://www.waterboards.ca.gov/sandiego/board\\_info/agendas/2019/mar/item8/CBP\\_Presentation.pdf](https://www.waterboards.ca.gov/sandiego/board_info/agendas/2019/mar/item8/CBP_Presentation.pdf)

<sup>vii</sup> *BINATIONAL WATER QUALITY STUDY OF THE TIJUANA RIVER AND ADJACENT CANYONS AND DRAINS INTERNATIONAL BOUNDARY AND WATER COMMISSION UNITED STATES AND MEXICO Final Report*. (2018). [https://www.ibwc.gov/wp-content/uploads/2023/08/Min320\\_Binational\\_Report\\_TJ\\_River\\_Watershed\\_with\\_Appendix090120.pdf](https://www.ibwc.gov/wp-content/uploads/2023/08/Min320_Binational_Report_TJ_River_Watershed_with_Appendix090120.pdf)

<sup>viii</sup> Stigler Granados, P., Sant, K., Quintana, P., Hoh, E., Oren, E., Lopez-Galvez, N., Zavala Perez, M., & Ni, Y. (2024). *Tijuana River Contamination from Urban Runoff and Sewage: A Public Health Crisis at the Border*. [https://www.sdsu.edu/\\_files/tijuana-sewage-contamination-public-health-crisis-white-paper-021424.pdf](https://www.sdsu.edu/_files/tijuana-sewage-contamination-public-health-crisis-white-paper-021424.pdf)

<sup>ix</sup> <https://www.borderreport.com/news/environment/researchers-back-in-tijuana-river-valley-still-finding-hydrogen-sulfide-in-the-air/>

<sup>x</sup> <https://nacla.org/article/tijuana%27s-toxic-waters>

<sup>xi</sup> Joshua Emerson Smith. (2019, February 13). *Banned pesticides and industrial chemicals found flowing from Tijuana into San Diego*. San Diego Union-Tribune; San Diego Union-Tribune. <https://www.sandiegouniontribune.com/2019/02/13/banned-pesticides-and-industrial-chemicals-found-flowing-from-tijuana-into-san-diego/?clearUserState=true>

<sup>xii</sup> *Tijuana's Toxic Waters*. (2019). NACLA. <https://nacla.org/article/tijuana%27s-toxic-waters>

<sup>xiii</sup> Patrol, U., & Sector, S. (2019). *Tijuana Wastewater Flows- Impact on CBP Operations Overview and Status Briefing*. [https://www.waterboards.ca.gov/sandiego/board\\_info/agendas/2019/mar/item8/CBP\\_Presentation.pdf](https://www.waterboards.ca.gov/sandiego/board_info/agendas/2019/mar/item8/CBP_Presentation.pdf)

<sup>xiv</sup> *BINATIONAL WATER QUALITY STUDY OF THE TIJUANA RIVER AND ADJACENT CANYONS AND DRAINS INTERNATIONAL BOUNDARY AND WATER COMMISSION UNITED STATES AND MEXICO Final Report*. (2018). [https://www.ibwc.gov/wp-content/uploads/2023/08/Min320\\_Binational\\_Report\\_TJ\\_River\\_Watershed\\_with\\_Appendix090120.pdf](https://www.ibwc.gov/wp-content/uploads/2023/08/Min320_Binational_Report_TJ_River_Watershed_with_Appendix090120.pdf)

<sup>xv</sup> Stigler Granados, P., Sant, K., Quintana, P., Hoh, E., Oren, E., Lopez-Galvez, N., Zavala Perez, M., & Ni, Y. (2024). *Tijuana River Contamination from Urban Runoff and Sewage: A Public Health Crisis at the Border*. [https://www.sdsu.edu/\\_files/tijuana-sewage-contamination-public-health-crisis-white-paper-021424.pdf](https://www.sdsu.edu/_files/tijuana-sewage-contamination-public-health-crisis-white-paper-021424.pdf)