UPDATE - MINUTE 320 – WATER QUALITY WORKGROUP

- During the Regional Commission Meeting in El Paso on June 15, 2017, Commissioners instructed Principal Engineers and Secretaries to forge agreements on water quality. During July several meetings took place; resulting in the following actions to be completed by the end of August
  - Development of binational water quality monitoring plan for Tijuana River
  - Commitment on flow meters- PS CILA (1) and Tijuana River (2)
  - Development of a scope of work for a diagnostic on binational diversion/pumping
  - Conclude protocols for PS CILA O&M and Spill Notification (including internal MX (CESPT-CILA)
  - Adoption of plan for increased river monitoring in Mexico (6 times annually)
  - Specification for Emergency Generator for PS CILA (Possible US surplus)
  - Scope of Work for New Sediment Basin(s) in US – Main Channel/Smugglers Gulch/other
  - Agreement on transfer of City of IB used Vactor truck to IBWC for use in Tijuana

UPDATE ON MINUTE 320 – WATER QUALITY WORKGROUP

- Development of Binational Water Quality Monitoring Plan. CONAGUA Plan Introduced on 8/31/17- twice monthly monitoring for 12 sites effective 9/1/17 US side 4 sites - dependent on funding.
- Meter Installation at PB CILA for quantifying flows and notification of on/off status of pump station – (complete by end of September 2017)
- Flow Measurement by MXIBWC on Rio Alamar above confluence with Rio Tijuana and Rio Tijuana above and below PS- CILA (complete by end of Sept 2017)
- Formalized Protocols for PS CILA operation and maintenance and Spill Notification (Completed)
- River Inspections in Mexico (every two months – next scheduled later this month)
- Specification on Emergency Generator received, no US surplus available now in that size
- Feasibility Study for Main Channel/Smugglers Sediment Basin – pending final scope, informed by Phase 2 H&H
- Update of Mexico's (CESPT) Infrastructure Rehabilitation Plan – 9.8M allocated, total estimated at $275 M

Medición de flujos en Río Tijuana y Río Alamar

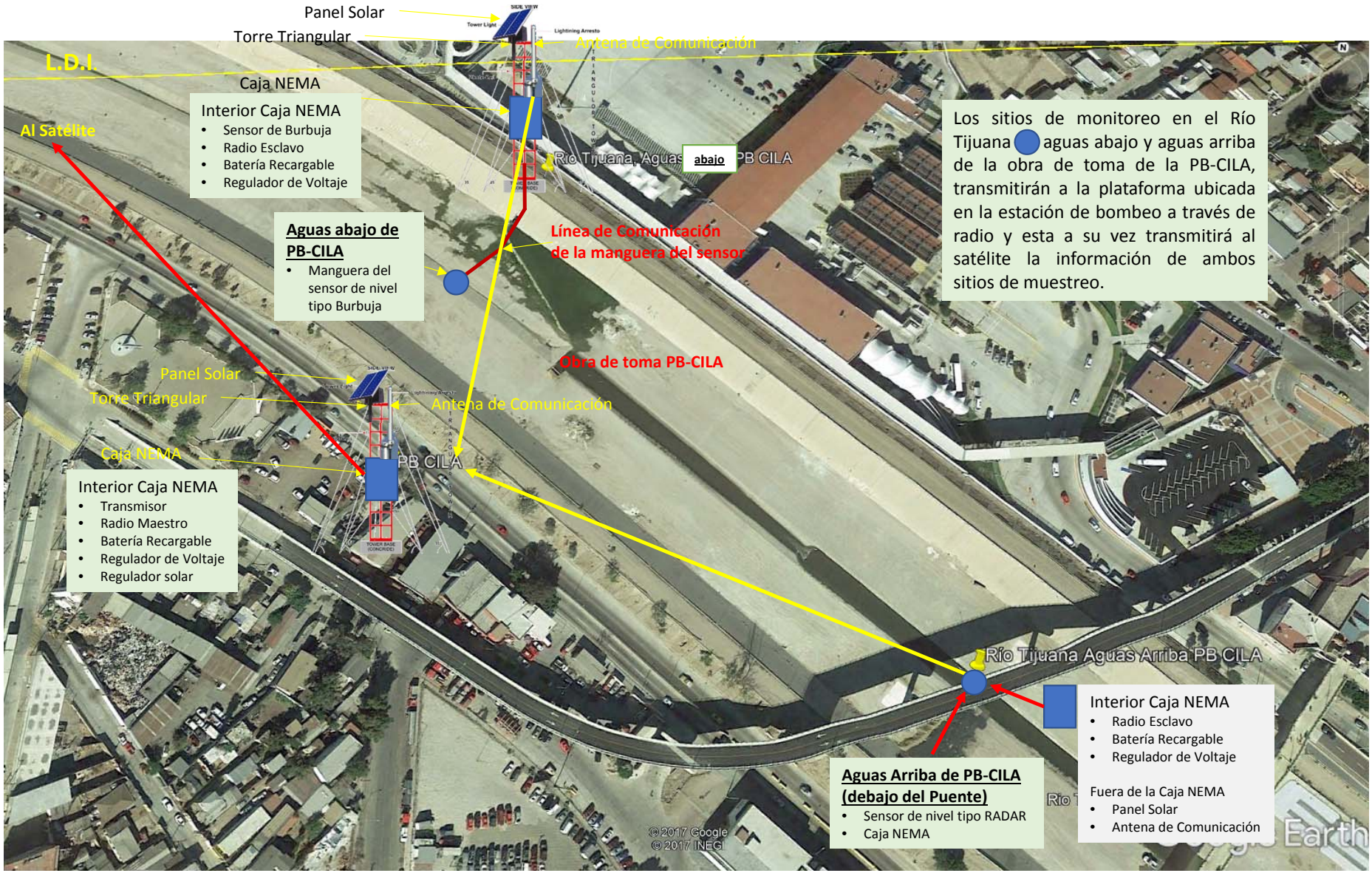
Sitios propuestos para la instalación de instrumentación de Telemetría para la obtención de información en tiempo real de los flujos de agua.

INTERNATIONAL BOUNDARY AND WATER COMMISSION

COMISION INTERNACIONAL DE LIMITES Y AGUAS

Medicíon de flujos Río Tijuana y Río Alamar

Sitios Propuestos


Panel Solar
Torre Triangular
Antena de Comunicación
L.D.I.
Caja NEMA
Interior Caja NEMA
Sensor de Burbuja
Radio Esclavo
Batería Recargable
Regulador de Voltaje
Al Satélite
Río Tijuana, Aguas abajo PB CILA
Aguas abajo de PB-CILA
Manguera del sensor de nivel tipo Burbuja
Línea de Comunicación de la manguera del sensor
Los sitios de monitoreo en el Río Tijuana aguas abajo y aguas arriba de la obra de toma de la PB-CILA, transmitirán a la plataforma ubicada en la estación de bombeo a través de radio y esta a su vez transmitirá al satélite la información de ambos sitios de muestreo.
Obra de toma PB-CILA
Panel Solar
Torre Triangular
Antena de Comunicación
Caja NEMA
PB CILA
Interior Caja NEMA
Transmisor
Radio Maestro
Batería Recargable
Regulador de Voltaje
Regulador solar
Río Tijuana Aguas Arriba PB CILA
Interior Caja NEMA
Radio Esclavo
Batería Recargable
Regulador de Voltaje
Fuera de la Caja NEMA
Panel Solar
Antena de Comunicación
Aguas Arriba de PB-CILA (debajo del Puente)
Sensor de nivel tipo RADAR
Caja NEMA
© 2017 Google
© 2017 INEGI

Medidor - Sensor de nivel tipo radar
CILA/IBWC

Descripción	Fecha estimada
Solicitud de equipo para los sitios de monitoreo para los ríos Tijuana y Alamar	3 de Agosto de 2017
Recepción de equipo para la instalación de las estaciones sobre el Río Tijuana (sensor tipo burbuja para aguas abajo de la obra de toma de PB-CILA y equipo de telecomunicaciones).	4-8 de Septiembre de 2017
Recepción de sensor de nivel tipo radar para instalarse en el Río Tijuana aguas arriba de la obra de toma de PB-CILA	11-15 de septiembre de 2017
Recepción de equipo para instalación de estación sobre el río Alamar	4-8 de Septiembre de 2017
Instalación de estaciones con transmisión vía satélite en los Ríos Tijuana y Alamar.	18-22 de Septiembre de 2017

FLOW METERING, PUMP STATION CILA

- Sensor installed between diversion intake and wet well
- Meter installed, conduit between sensor and meter pending.
- Calibration necessary for current operations sequence
- Meter can send out emails of on/off status; users can log on to view current flow being pumped

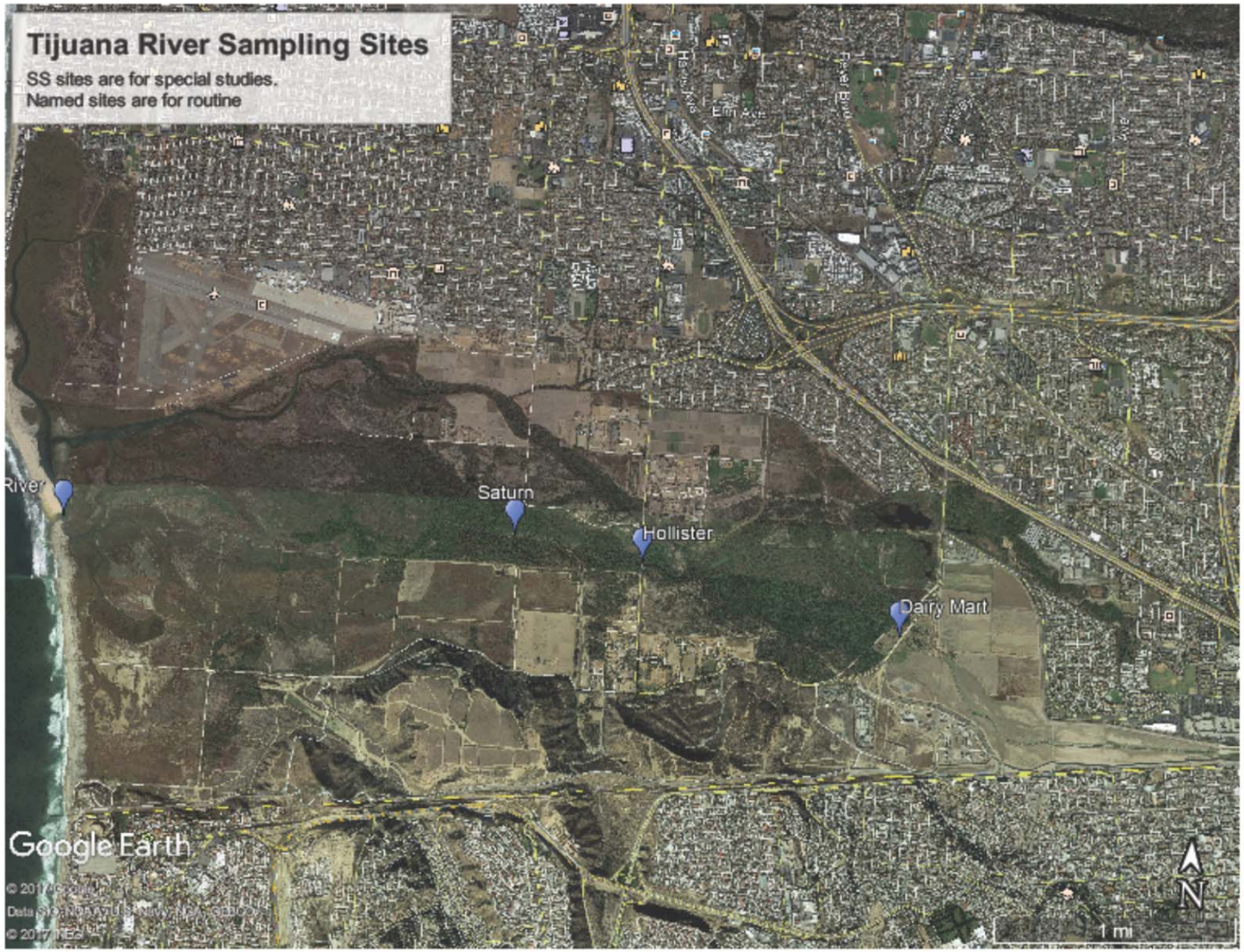
PUMP STATION CILA

SENSOR WITH RING MOUNT

INSTALLED METER

WATER QUALITY WORKGROUP – MONITORING IN U.S

Location Name	Latitude	Longitude
Mouth of the River	32°33'8.38"N	117° 7'34.18"W
Saturn Street	32°33'9.94"N	117° 5'36.08"W
Hollister Street	32°33'5.17"N	117° 5'2.52"W
Dairy Mart Bridge	32°32'52.30"N	117° 3'55.05"W


Tijuana River Sampling Sites
SS sites are for special studies.
Named sites are for routine
River
Saturn
Hollister
Dairy Mart
Google Earth
N
1 mi

WATER QUALITY WORKGROUP – MONITORING IN U.S.

Parameter	Frequency
Temperature (degrees Celsius)	Monthly
Dissolved Oxygen	Monthly
Conductivity	Monthly
pH	Monthly
Bacteria	
Bacteria **E. coli**	Monthly except Dairy Mart which will tested weekly
Conventionals	
Total Dissolved Solids	Monthly
Chlorides	Monthly
Sulfates	Monthly
Ammonia NH4	Monthly
Nitrates	Monthly
Total and Ortho Phosphorous	Monthly
Oil and Grease	Monthly

WATER QUALITY WORKGROUP – MONITORING IN MEXICO

CONAGUA
COMISIÓN NACIONAL DEL AGUA

SITIOS MONITOREO

Nombre del Sitio	LAT_SITIO	LONG_SITIO
RIO TIJUANA LI	32.541434°	-117.037495
RIO TIJUANA	32.53845	-117.03233
RIO TIJUANA 1	32.4542	-116.90589
RIO TIJUANA 2	32.47403	-116.92771
RIO TIJUANA 3	32.51382	-116.96873
RIO TIJUANA 4	32.5159	-116.97926
ARROYO CONFLUENCIA CON ARROYO EL FLORIDO	32.44803	-116.8794
ARROYO ALAMAR 1	32.51572	-116.92574
ARROYO ALAMAR 2	32.52939	-116.89838
ARROYO ALAMAR 3	32.51535	-116.97006
RIO TECATE	32.54657	-116.67406
RIO TECATE 2	32.39477	-117.00259

WATER QUALITY WORKGROUP – MONITORING IN MEXICO

CONAGUA
COMISIÓN NACIONAL DEL AGUA

FRECUENCIA DE MUESTREO

Bimestral

PARAMETROS A REALIZAR

CAMPO	FISICOQUIMICO	BACTERIOLOGICOS	METALES
CAUDAL	COLOR_VER	E_COLI	AS_TOT
CONDUC_CAMPO	COT	COLI_FEC	CD_TOT
OD_PORC	DBO_TOT	COLI_TOT	CN_TOT
OD_MGL	DQO_TOT		CR_TOT
PH_CAMPO	DUR_TOT		HG_TOT
TEMP_AGUA	N_NH3		PB_TOT
TEMP_AMB	N_NO2		NI_TOT
	N_NO3		
	N_ORG		
	N_TOT		
	N_TOTK		
	ORTO_PO4		
	P_TOT		
	SAAM		
	SALINIDAD		
	SDT		
	SST		
	TURBIEDAD		

WATER QUALITY WORKGROUP- DIAGNOSTIC FOR DIVERSION & PUMPING

- Development of a Diversion/Pumping Diagnostic to be funded by BECC/EPA. Scope has been finalized, has been sent to Mexico for comment. Plan is to award in October. Will include transboundary flow analysis, evaluation of existing conditions at PS CILA, PS No. 1 and SBIWTP and evaluate what can be done to optimize flow diversion and pumping. Development of alternatives to increase capacity of PS CILA, construct an additional diversion in Mexico, construct additional diversion and pumping in US. Evaluate return flow to Mexico, discharge through Emergency Connection, discharge though SBOO with or without additional treatment. All alternatives will be evaluated against effect on transboundary flows and beach closure days.

UPDATE ON MINUTE 320 – SEDIMENT WORKGROUP

- MOU between City of San Diego and Army Corps of Engineers on Hydraulics and Hydrology Study – Phase 1 has been completed on the US side, report not yet final.
- Agreement by Mexico to participate in Phase 2 of the study. Study will analyze dams, flows, sediment transport in the watershed. A request has been made by the City for Mexico data – data exchange is being coordinated. Phase 2 scope will be initiated in Oct 2017.
- Scope of Work for Feasibility of Sediment Basin in Main Channel Tijuana River and Smugglers Gulch/ other locations – in progress by USIBWC. This was in response to a letter from South Bay area mayors. A response was sent August 1.
- Binational Exchange of Existing Sediment Management Activities
- Information Sharing on Use of Dedicated Sites for Sediment Disposal in Mexico and the US.

UPDATE ON MINUTE 320 – SOLID WASTE WORKGROUP

- Development of SOW for Feasibility Study for Solid Waste Traps at 3 Locations in Mexico and the US. (completed - pending funding)
- NOAA Marine Debris Grant- funding for TRAM, Goat Canyon Sed Basin, technology and transborder information transfer to control single use plastic and Styrofoam products (ongoing)
- Plastic Bag Project Tijuana
- TRAM (Binational Cleanup Activities)
- 4 Walls International (NGO) - Social Environmental Impact Bond to source manage transboundary waste.

UPDATE ON MINUTE 320 – INTEGRATED PROGRAM FOR WATERSHED

- Mexico NGO proposal to Foundation Gonzalo Rio Arronte, called "Integrated Water Management Program for the Tijuana River Watershed". The Tijuana Watershed is one of a number of watersheds that have been identified by the Foundation.
- The Foundation is a source of funding for watershed based water projects, primarily in Latin America. Eight to ten year funding cycle.
- The NGOs (COLEF, Pronatura Noroeste, PFEA) will provide the research, technical and administrative support. Update provided at BCG meeting on Aug 31, 768 projects were identified in 9 priority areas in Mexico alone, presentation of Master Plan by November 2017.