DEPURACIÓN DE AGUAS RESIDUALES EN LA RIOJA

Miguel Gaztelu Albero
Zaragoza 26 de noviembre de 2.013

Herramientas para gestionar el saneamiento en La Rioja

1. Plan Director de Saneamiento y Depuración

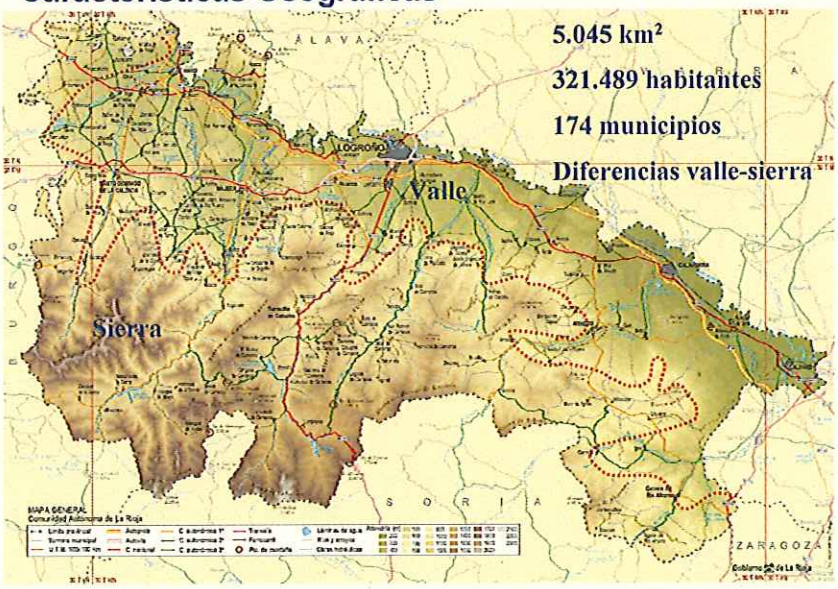
2. Ley 5/2000 de saneamiento y depuración de aguas residuales en La Rioja *(BOR 31/10/2.000)* y su Reglamento *(BOR 27/12/2.001)*
   - Órgano de gestión del Plan
   - Cánon de saneamiento
   - Control de vertidos

3. Financiación del Plan Director

LA RIOJA

Características principales

Características Geográficas



5.045 km²

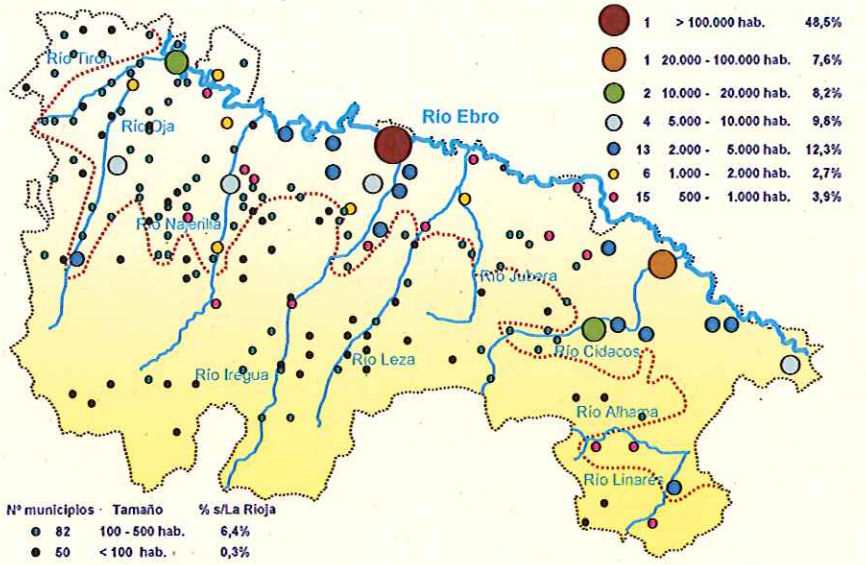
321.489 habitantes

174 municipios

Diferencias valle-sierra

LA RIOJA

Estructura municipal



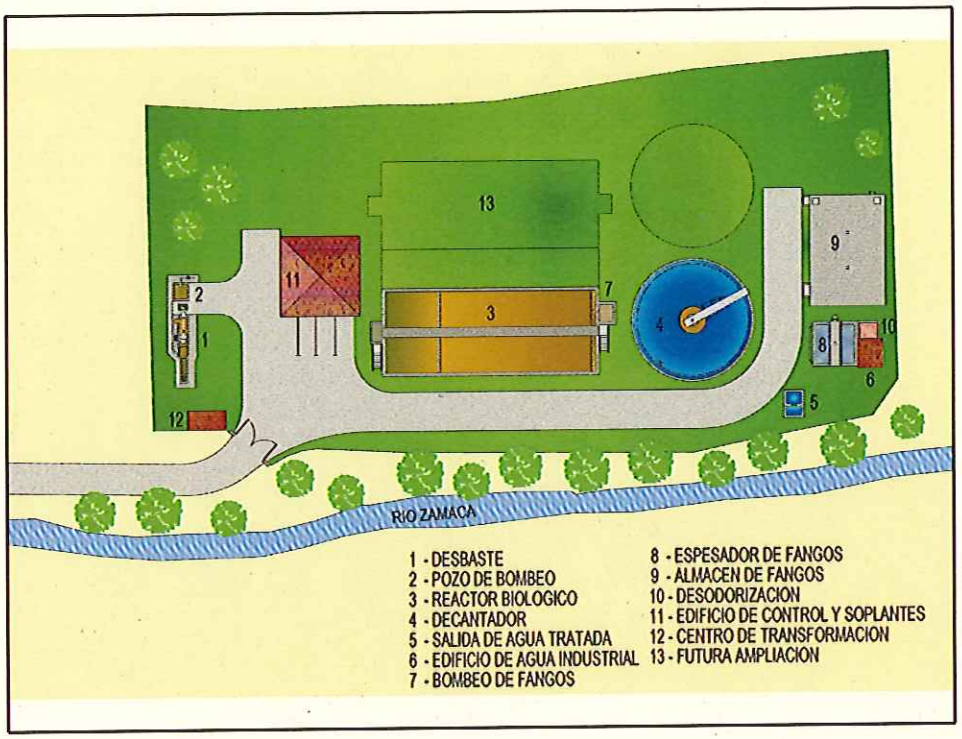
- **104 municipios conectados a una planta de tratamiento secundario** (98,5 % del censo)
- **73 plantas en servicio**
  - 42 de fangos activados
  - 24 de filtros percoladores
  - 5 humedales de flujo subsuperficial
  - 1 lagunaje
  - 1 filtro vertical de arena

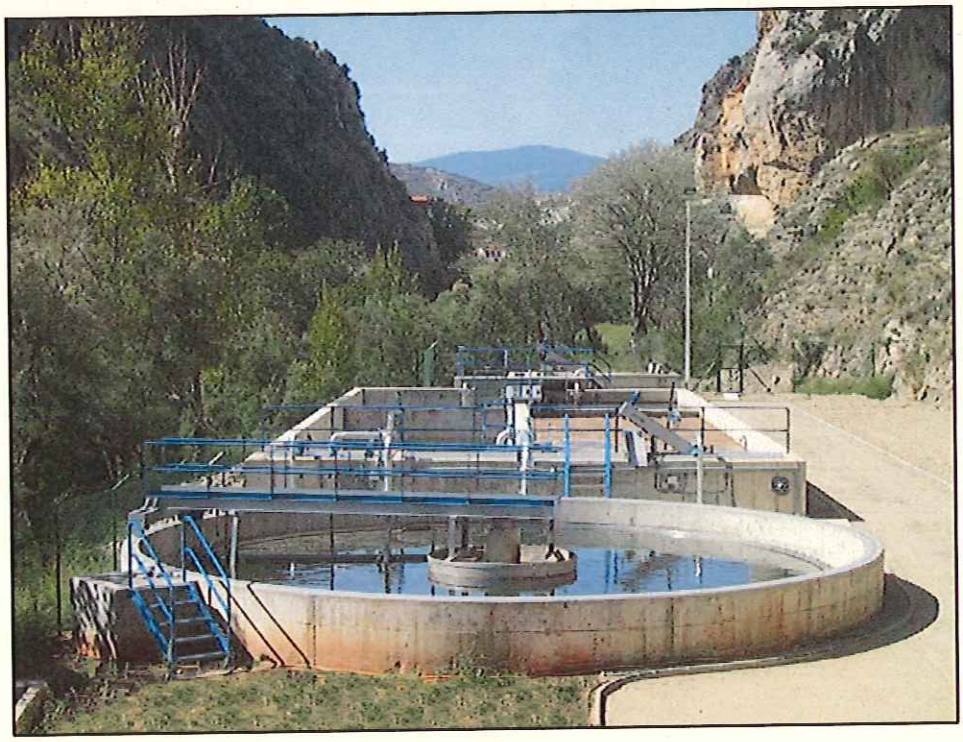
Fotografías

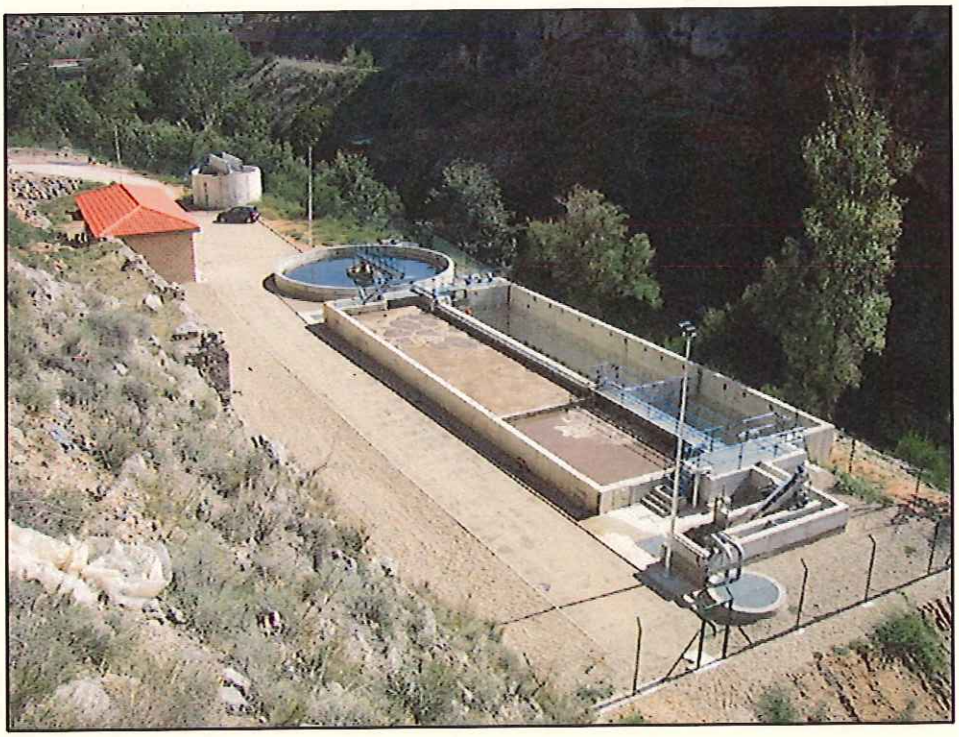
Fangos activados

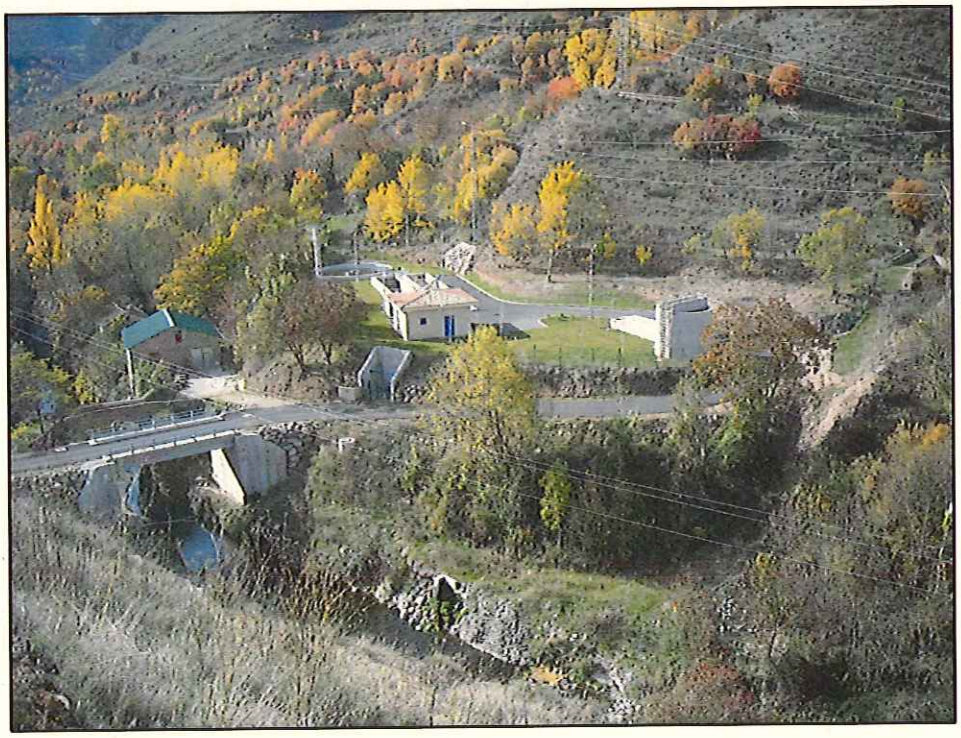
EDAR de Haro

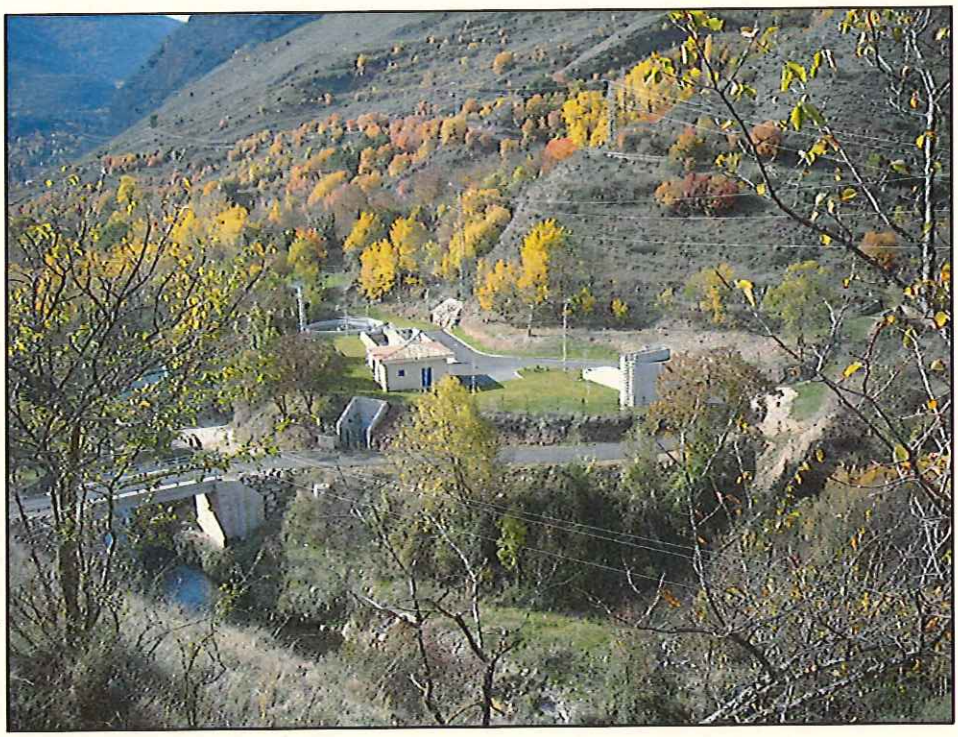
EDAR de Arrubal

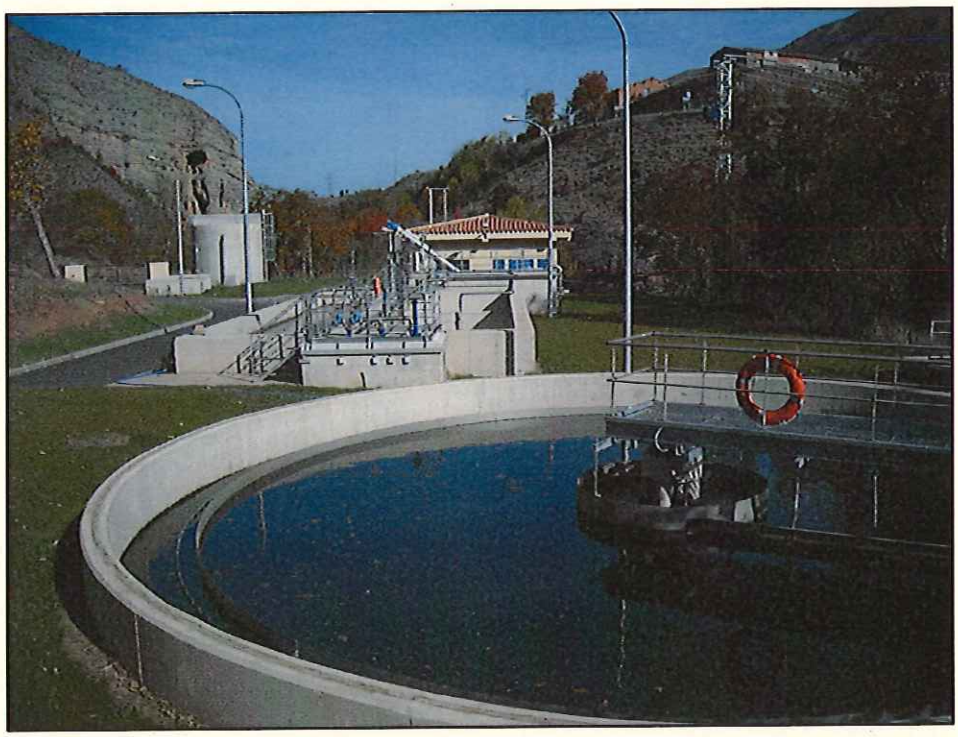

13
9
11
2
7
3
4
1
8
10
6
5
12
RIO ZAMACA
1 - DESBASTE
2 - POZO DE BOMBEO
3 - REACTOR BIOLOGICO
4 - DECANTADOR
5 - SALIDA DE AGUA TRATADA
6 - EDIFICIO DE AGUA INDUSTRIAL
7 - BOMBEO DE FANGOS
8 - ESPESADOR DE FANGOS
9 - ALMACEN DE FANGOS
10 - DESODORIZACION
11 - EDIFICIO DE CONTROL Y SOPLANTES
12 - CENTRO DE TRANSFORMACION
13 - FUTURA AMPLIACION

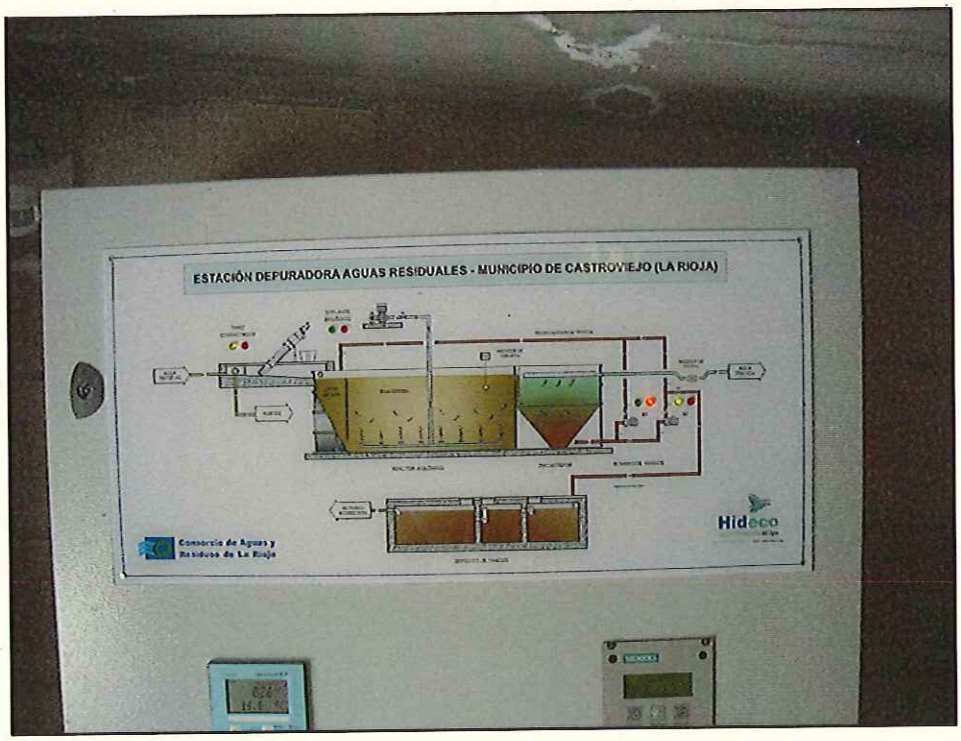


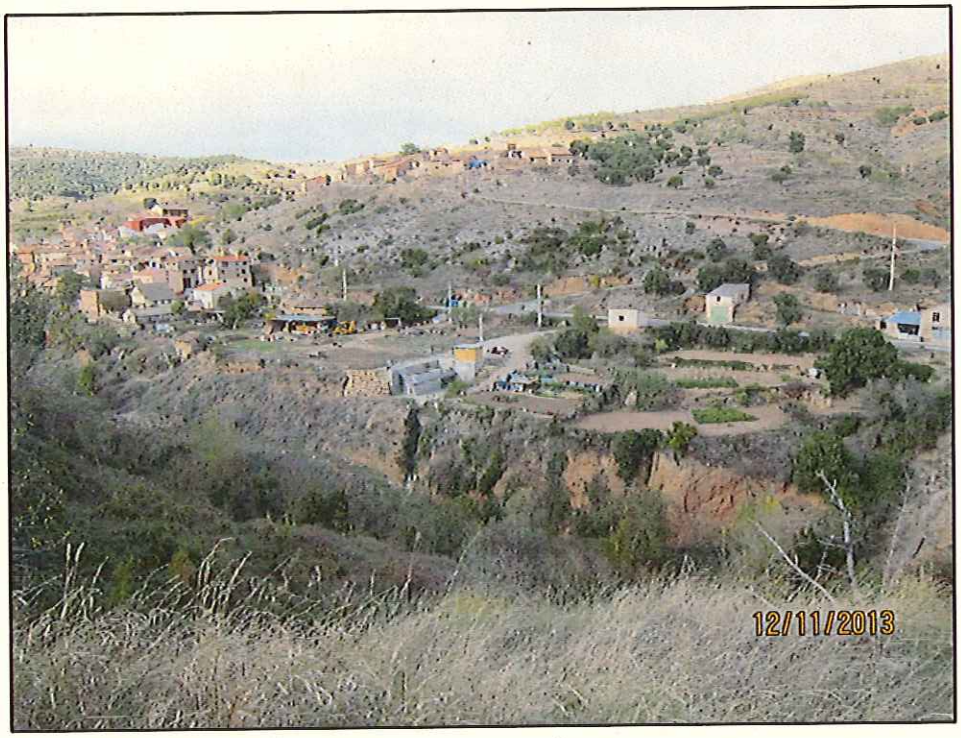


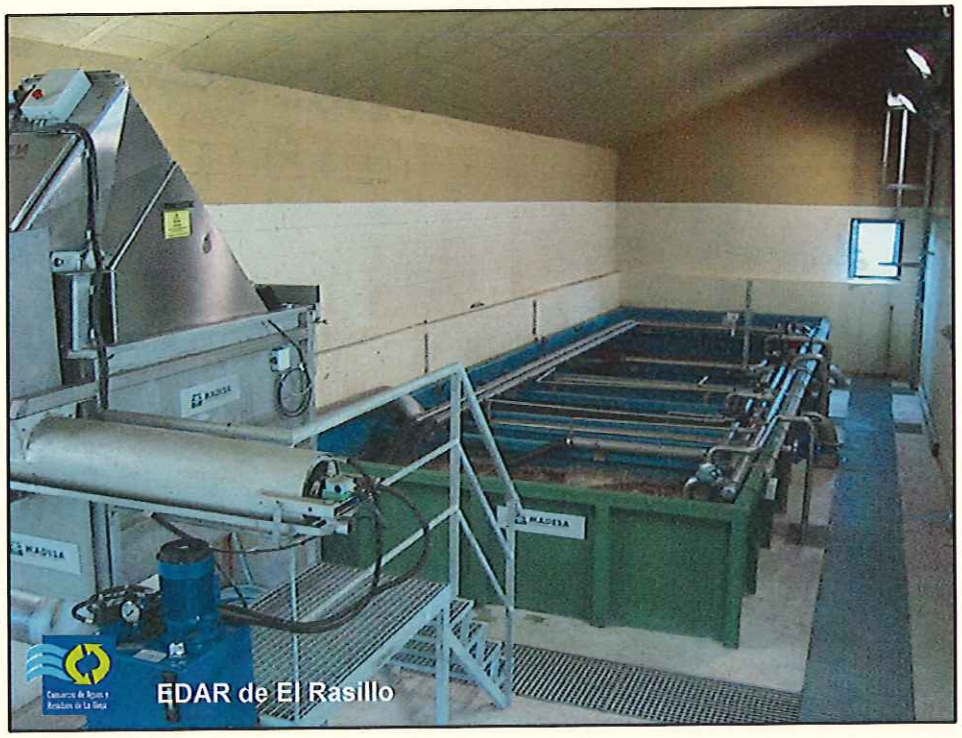







ESTACIÓN DEPURADORA AGUAS RESIDUALES - MUNICIPIO DE CASTROVIEJO (LA RIOJA)
Hidéco
Consorcio de Aguas y Residuos de La Rioja

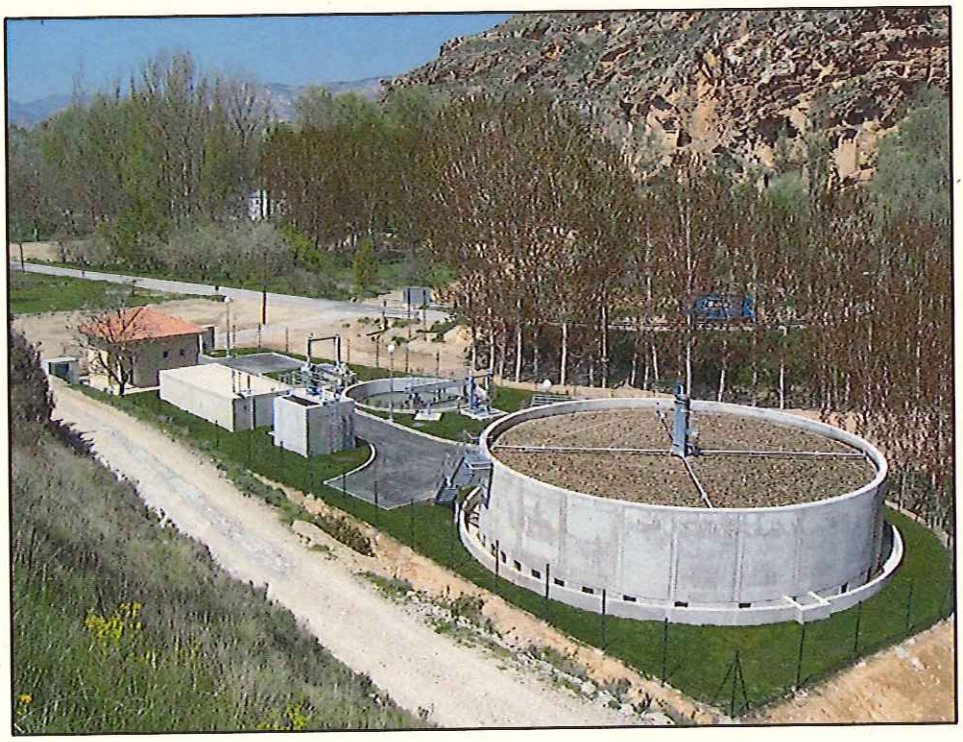

12/11/2013

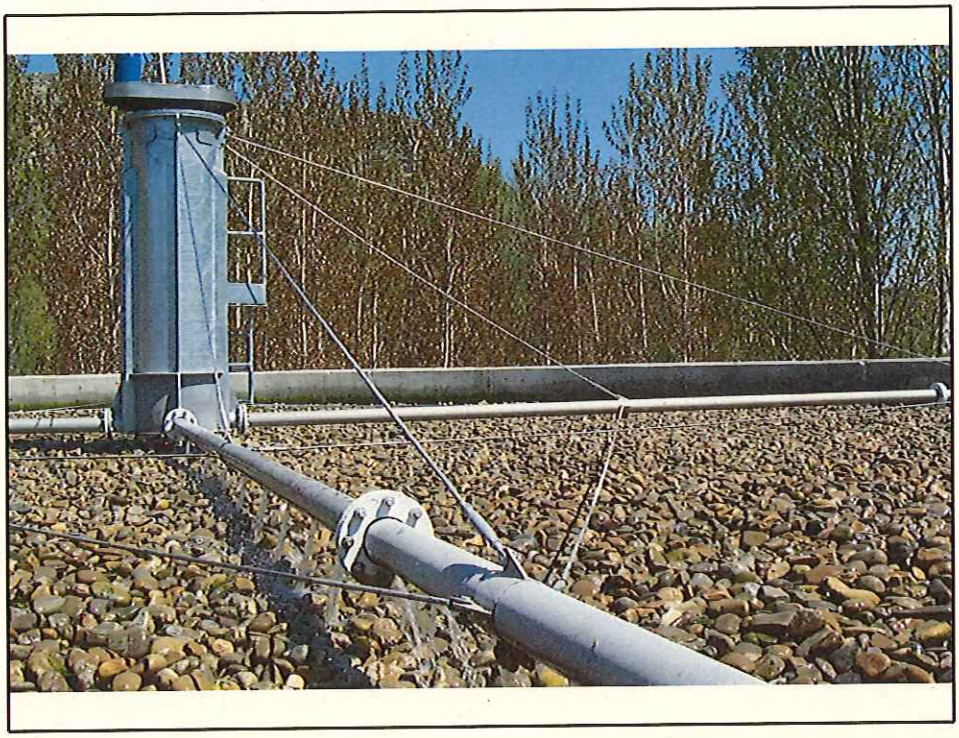


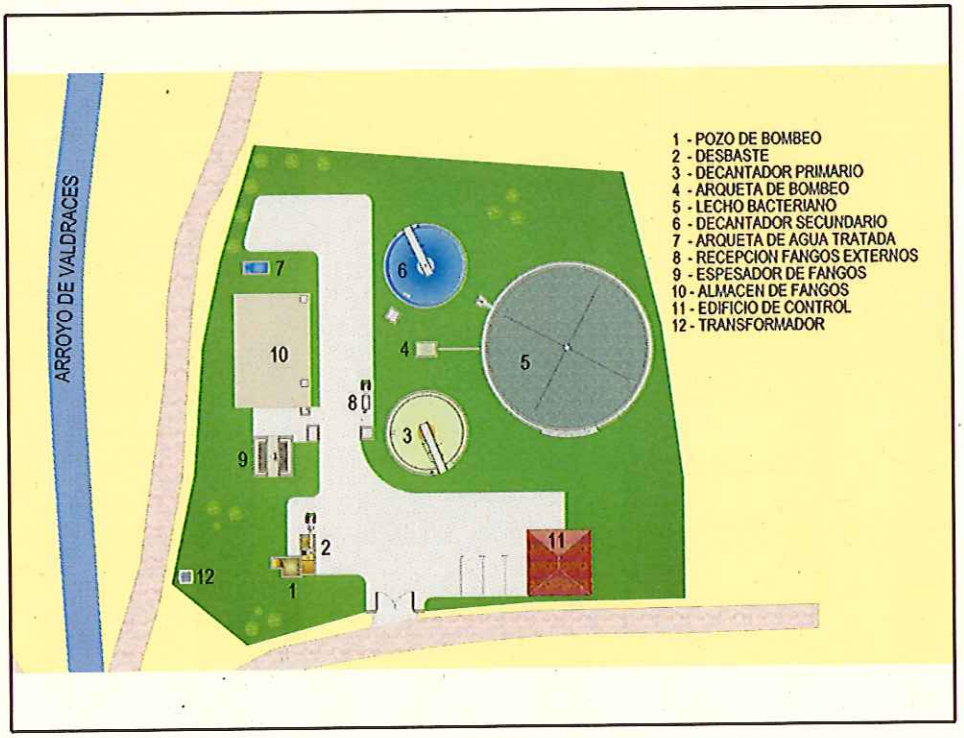
Consorcio de Aguas y Residuos de La Rioja

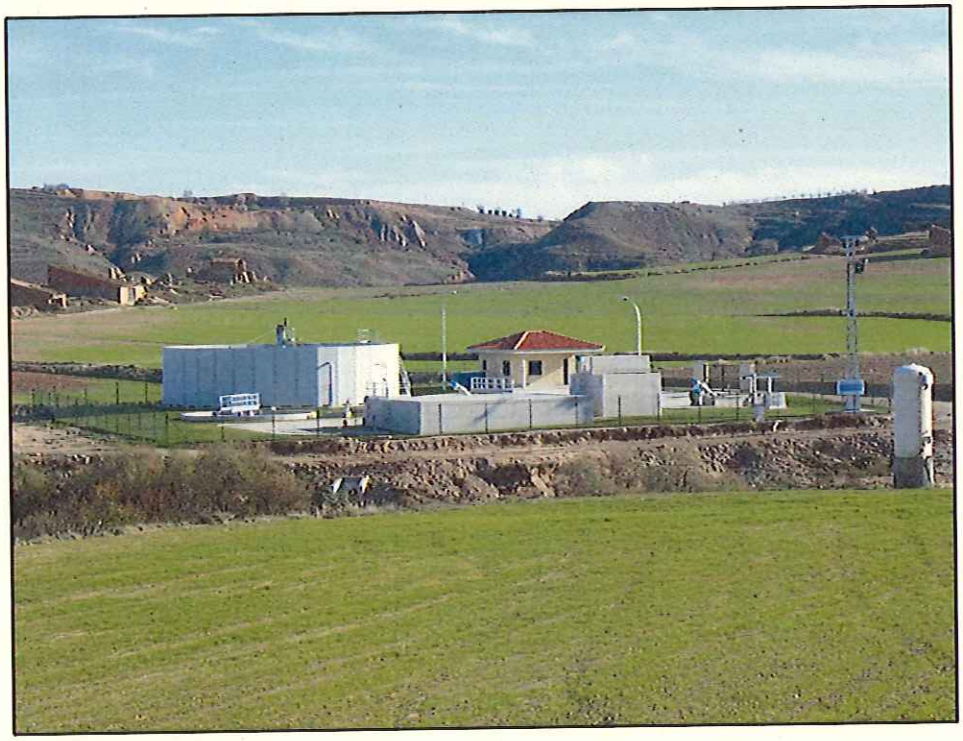
Fotografías

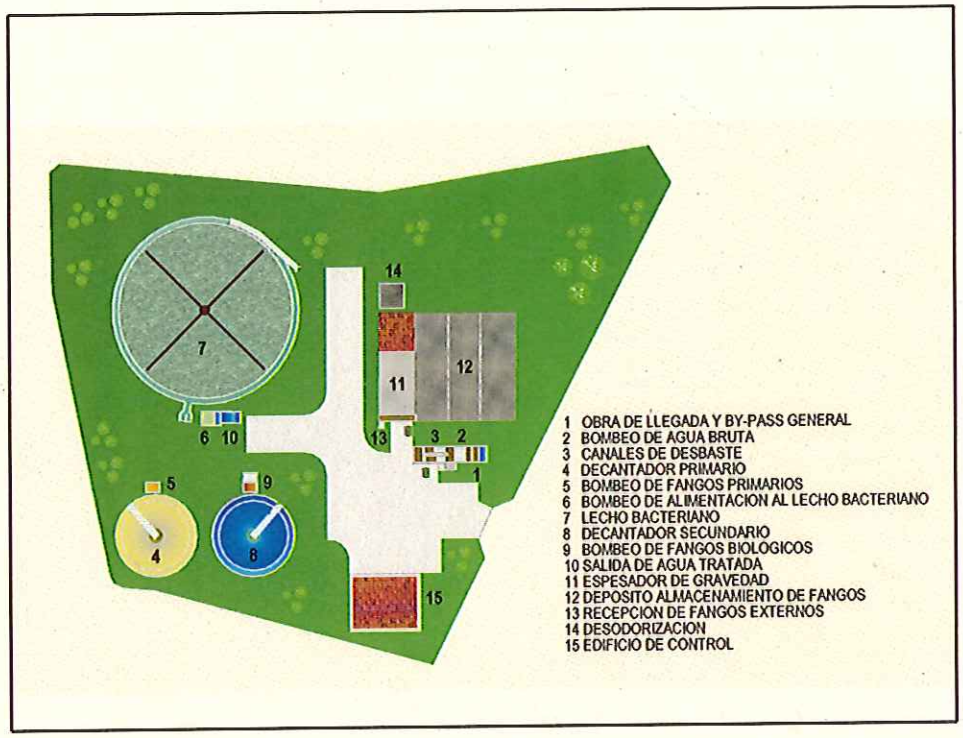
Filtros

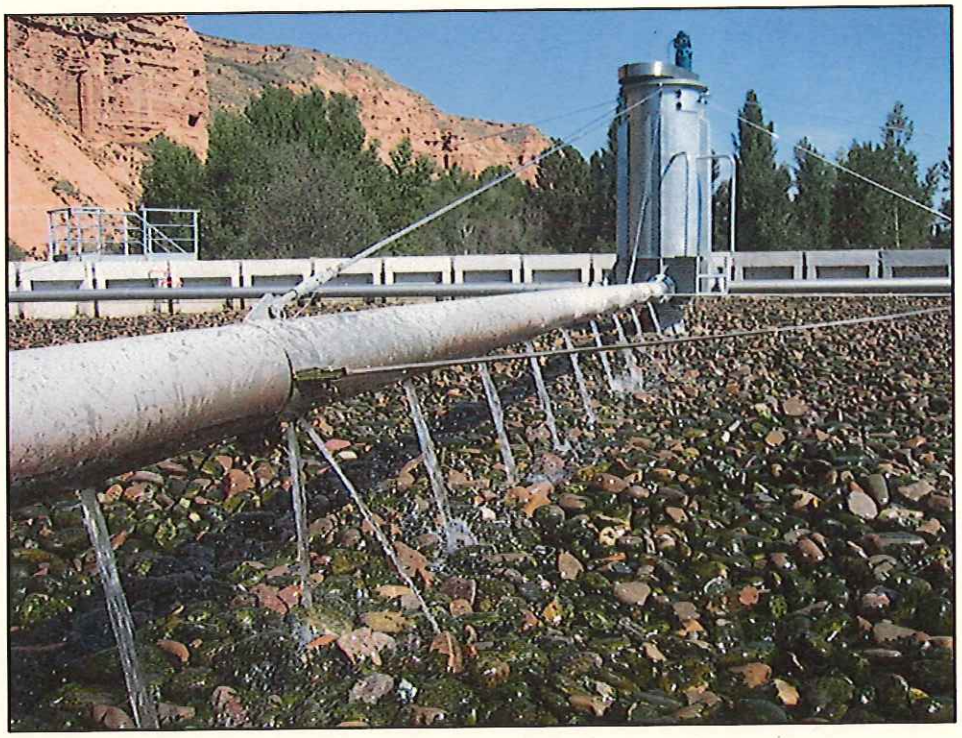


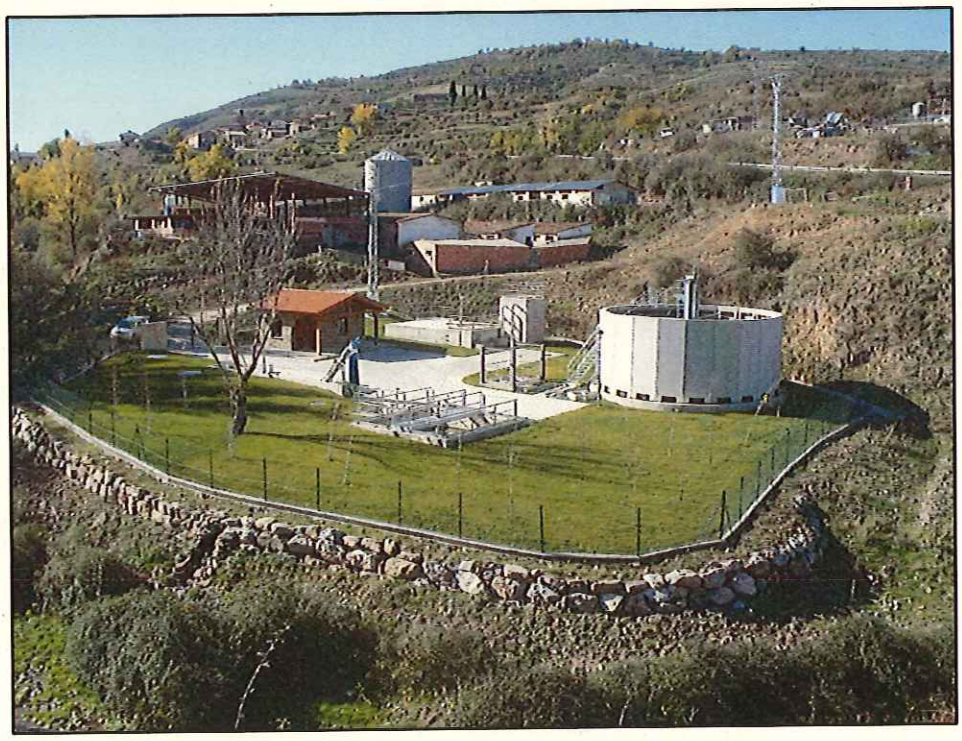


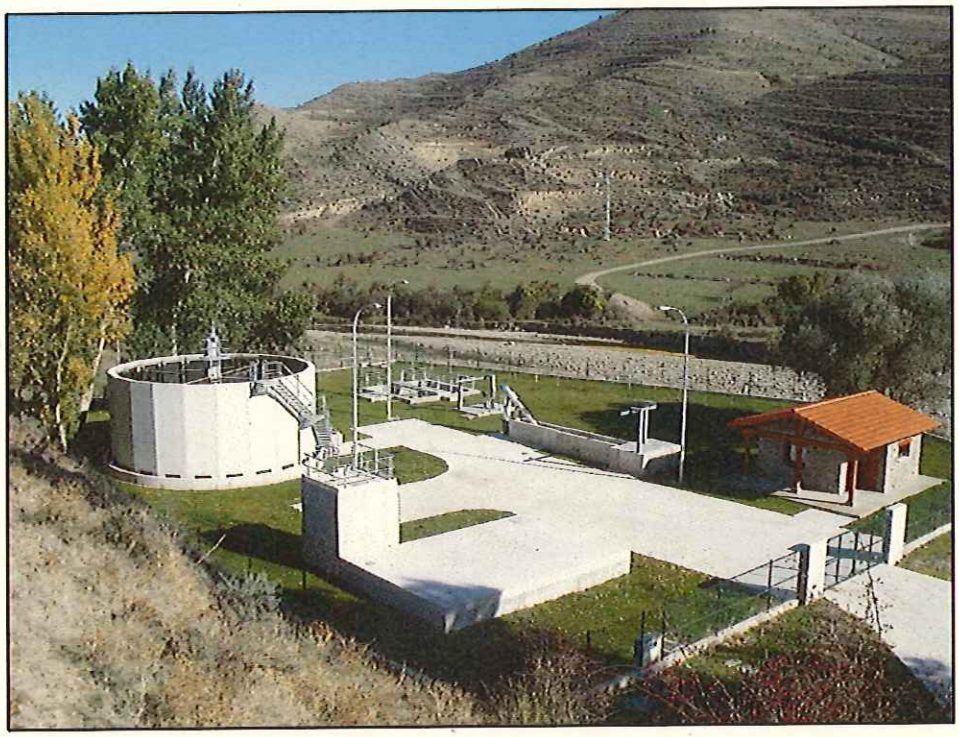

ARROYO DE VALDRACES
1 - POZO DE BOMBEO
2 - DESBASTE
3 - DECANTADOR PRIMARIO
4 - ARQUETA DE BOMBEO
5 - LECHO BACTERIANO
6 - DECANTADOR SECUNDARIO
7 - ARQUETA DE AGUA TRATADA
8 - RECEPCION FANGOS EXTERNOS
9 - ESPESADOR DE FANGOS
10 - ALMACEN DE FANGOS
11 - EDIFICIO DE CONTROL
12 - TRANSFORMADOR




14
7
11
12
6 10
13
3 2
1
5
9
4
8
15
1 OBRA DE LLEGADA Y BY-PASS GENERAL
2 BOMBEO DE AGUA BRUTA
3 CANALES DE DESBASTE
4 DECANTADOR PRIMARIO
5 BOMBEO DE FANGOS PRIMARIOS
6 BOMBEO DE ALIMENTACION AL LECHO BACTERIANO
7 LECHO BACTERIANO
8 DECANTADOR SECUNDARIO
9 BOMBEO DE FANGOS BIOLOGICOS
10 SALIDA DE AGUA TRATADA
11 ESPESADOR DE GRAVEDAD
12 DEPOSITO ALMACENAMIENTO DE FANGOS
13 RECEPCION DE FANGOS EXTERNOS
14 DESODORIZACION
15 EDIFICIO DE CONTROL







EDAR de Berceo. Filtro con relleno plástico

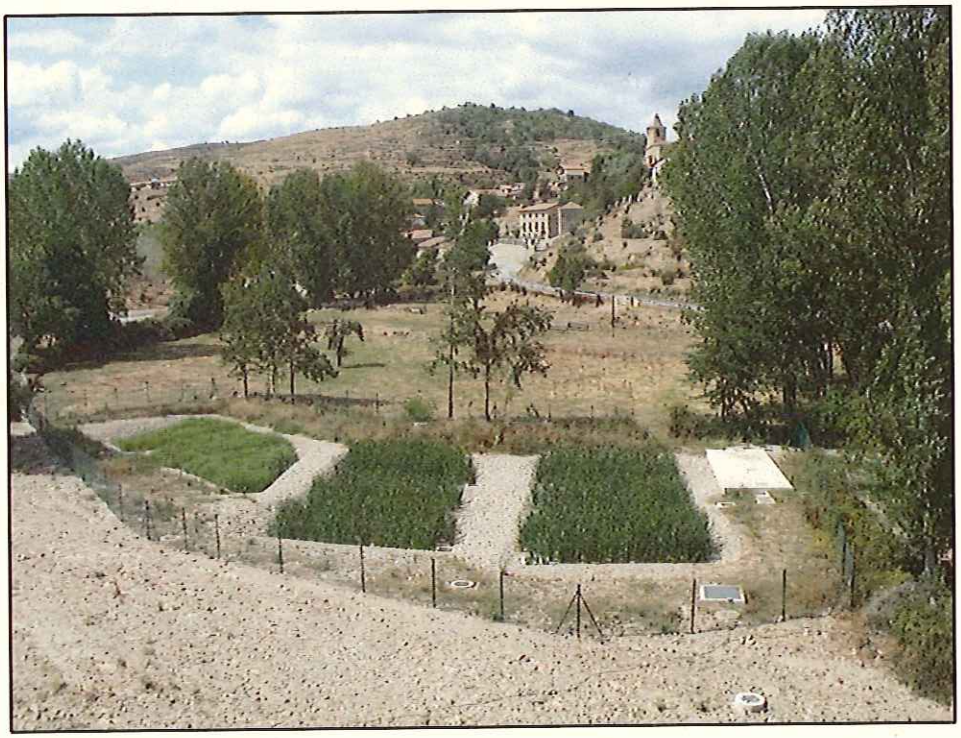
Fotografías

Humedales

12/12/2011

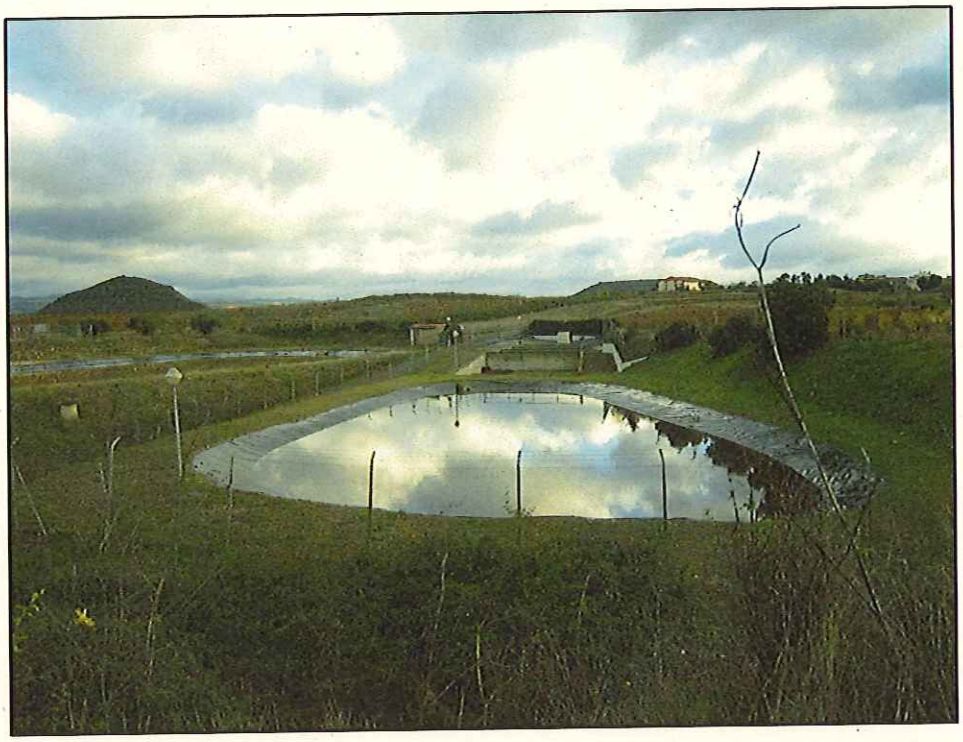
13/01/2012

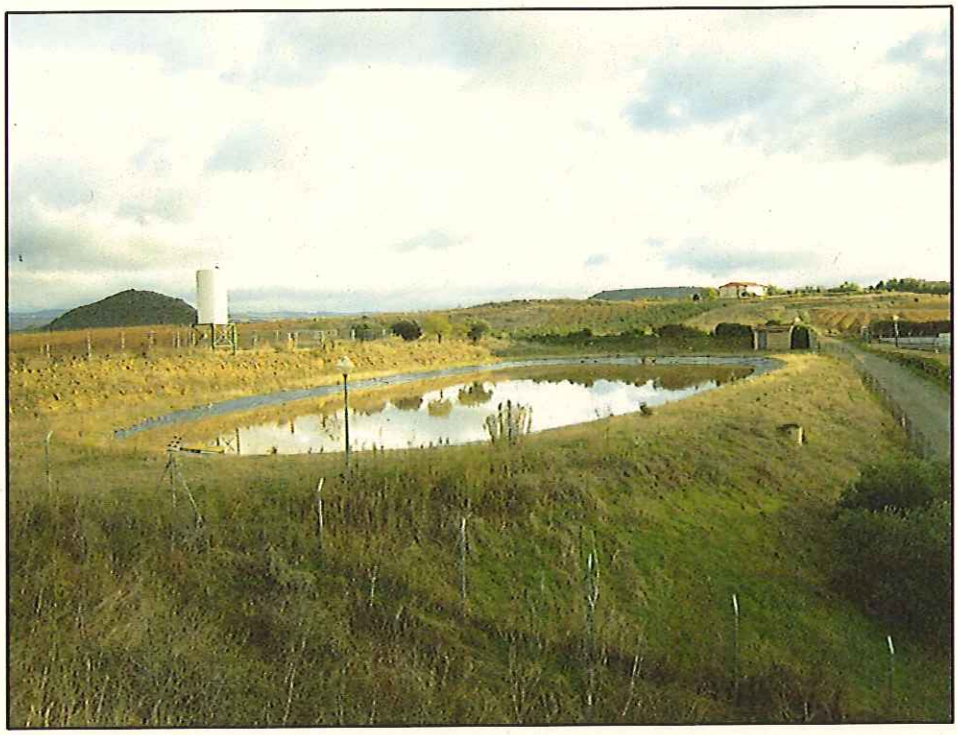
13/01/2012

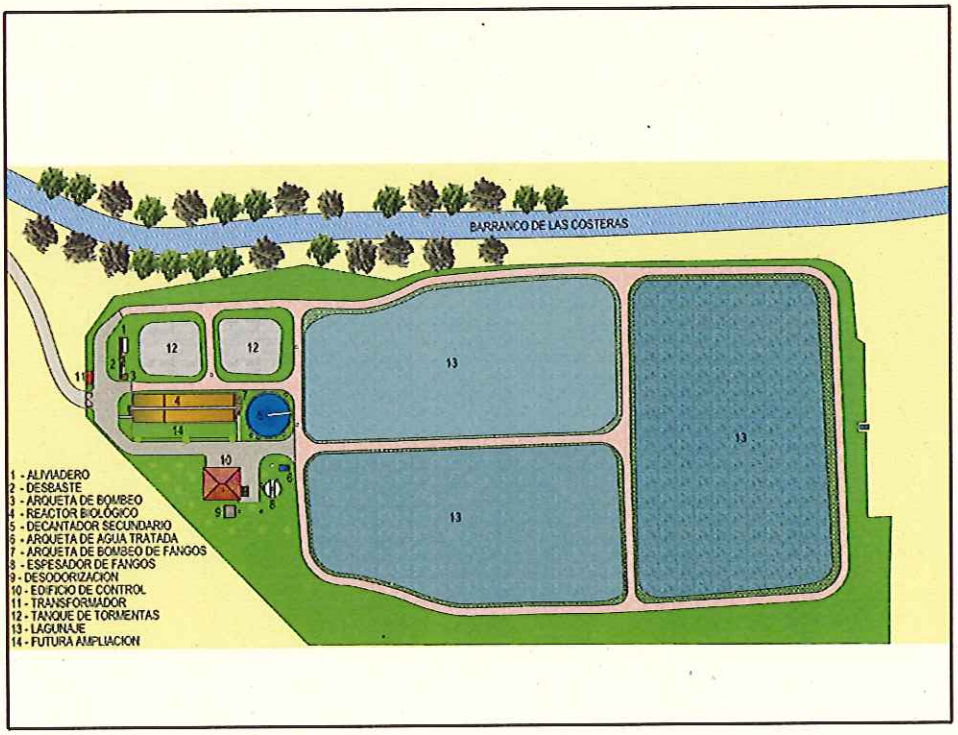


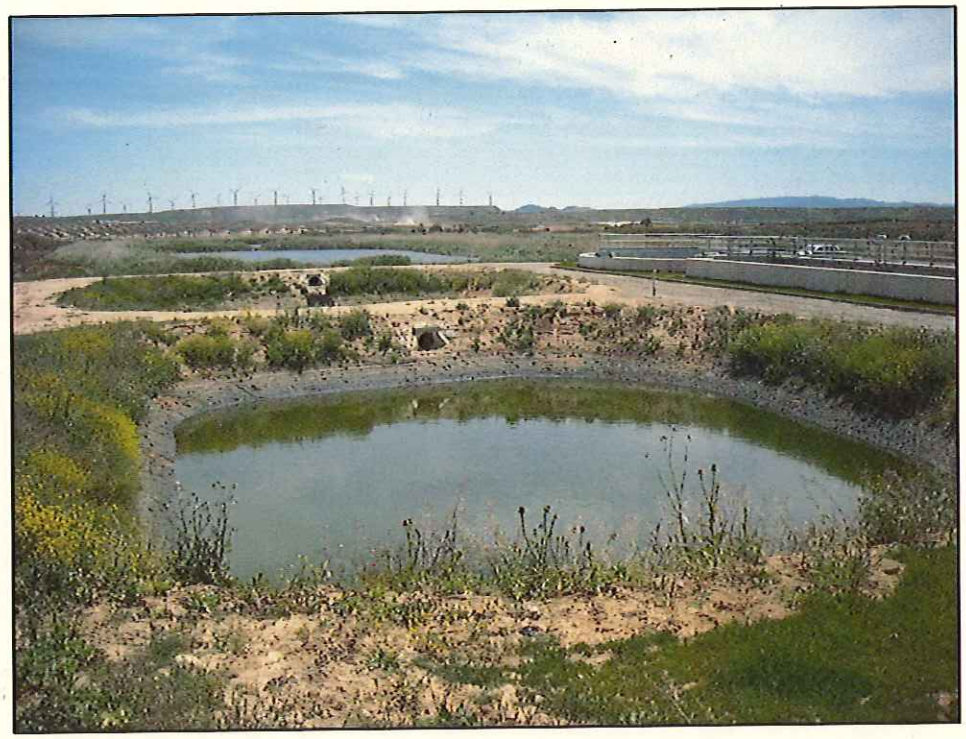
Fotografías

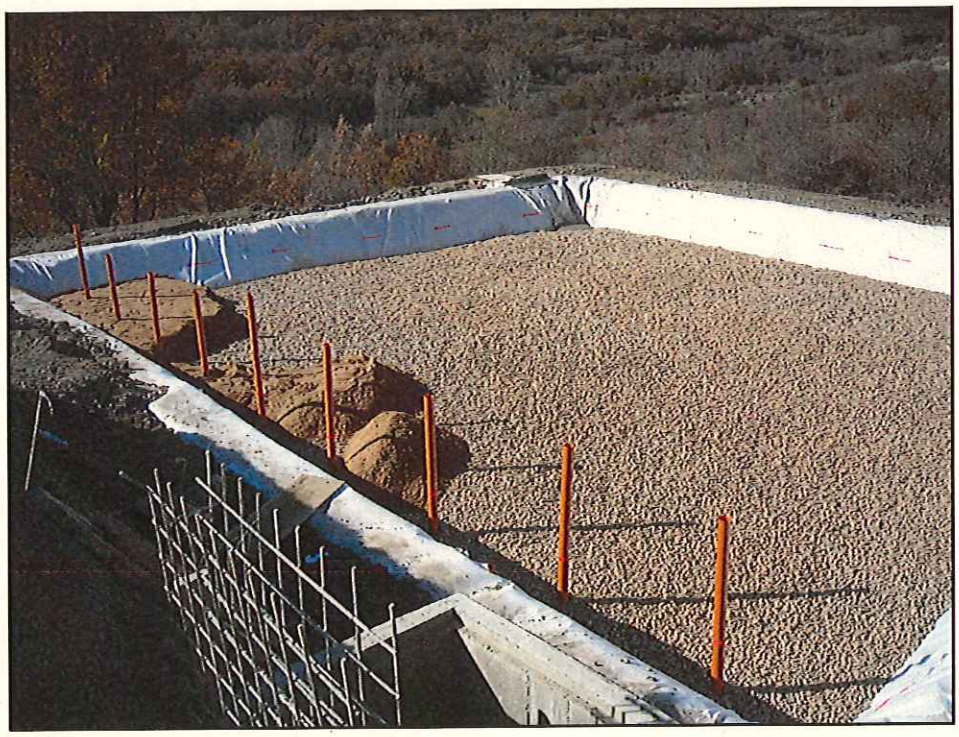
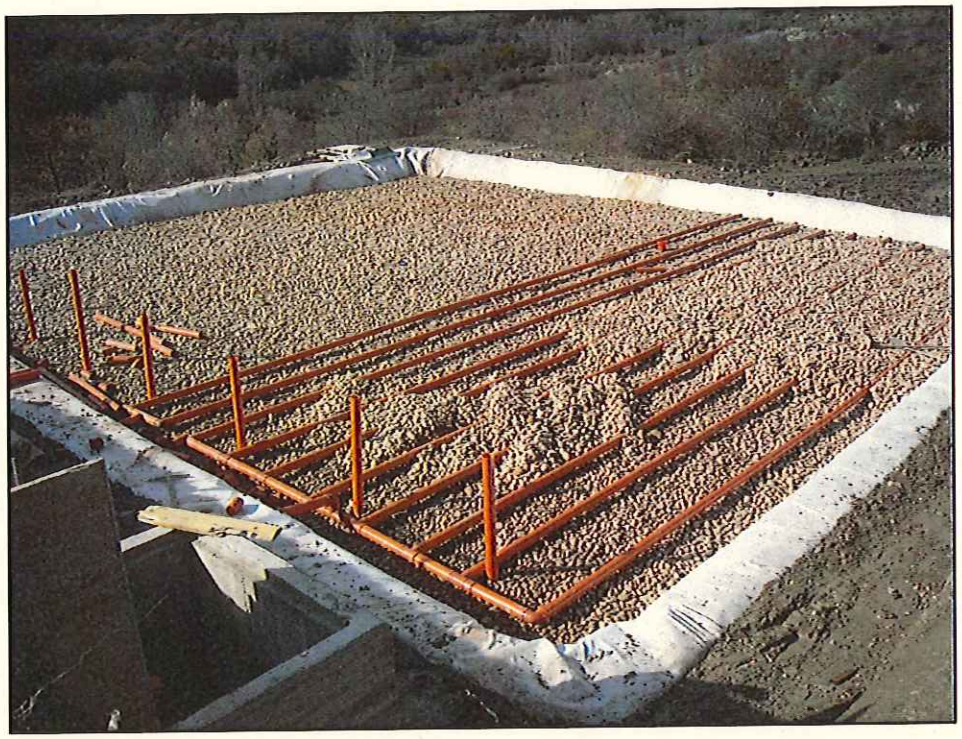
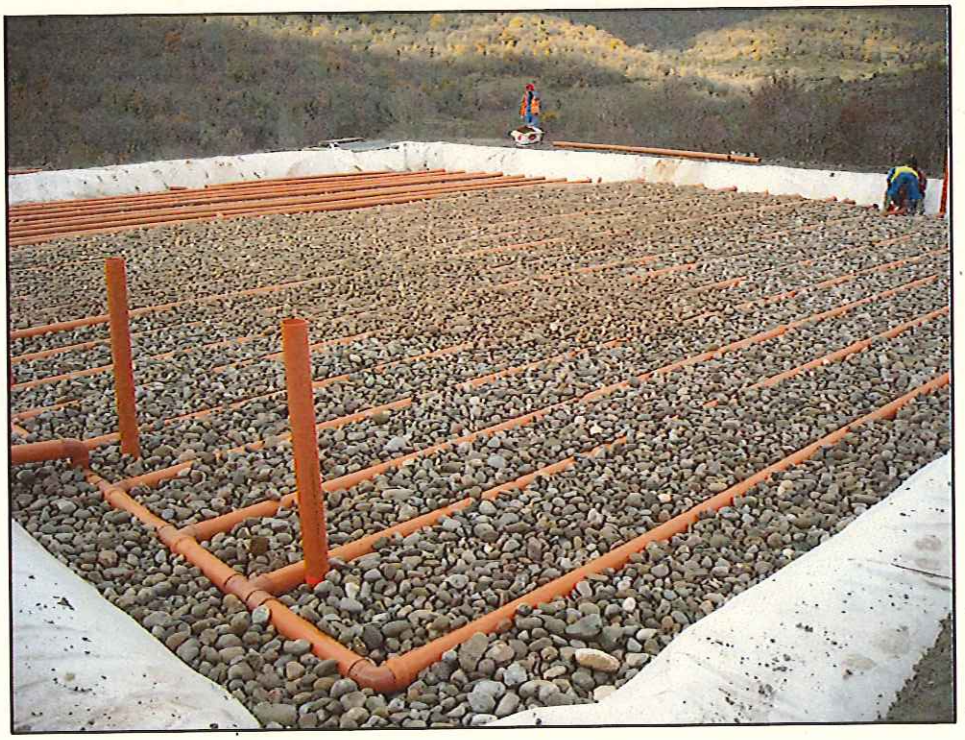
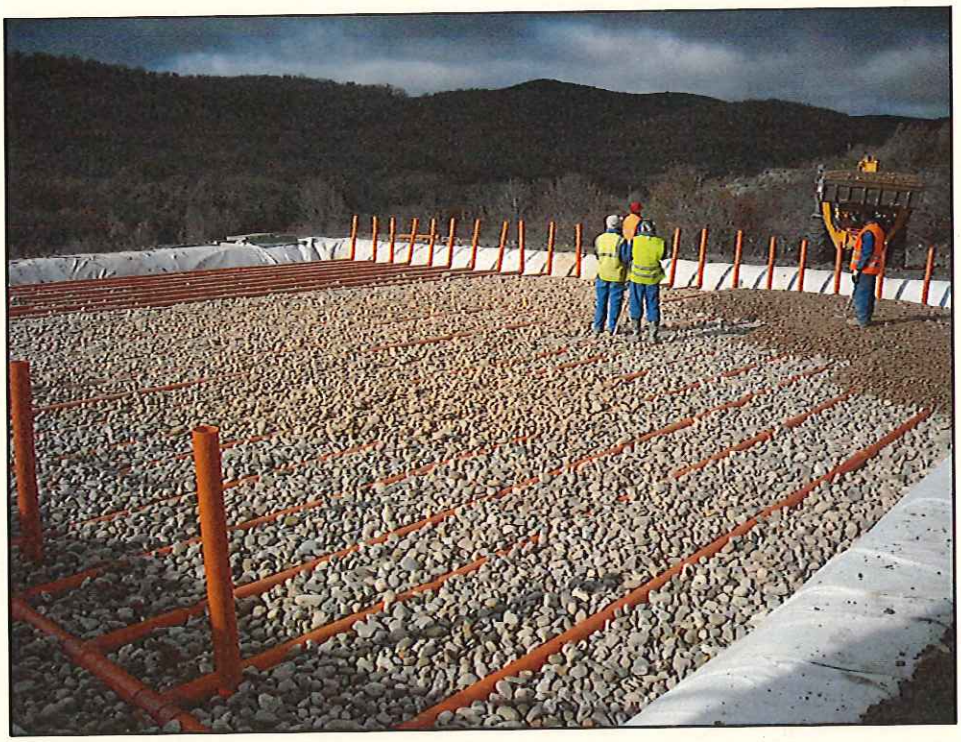
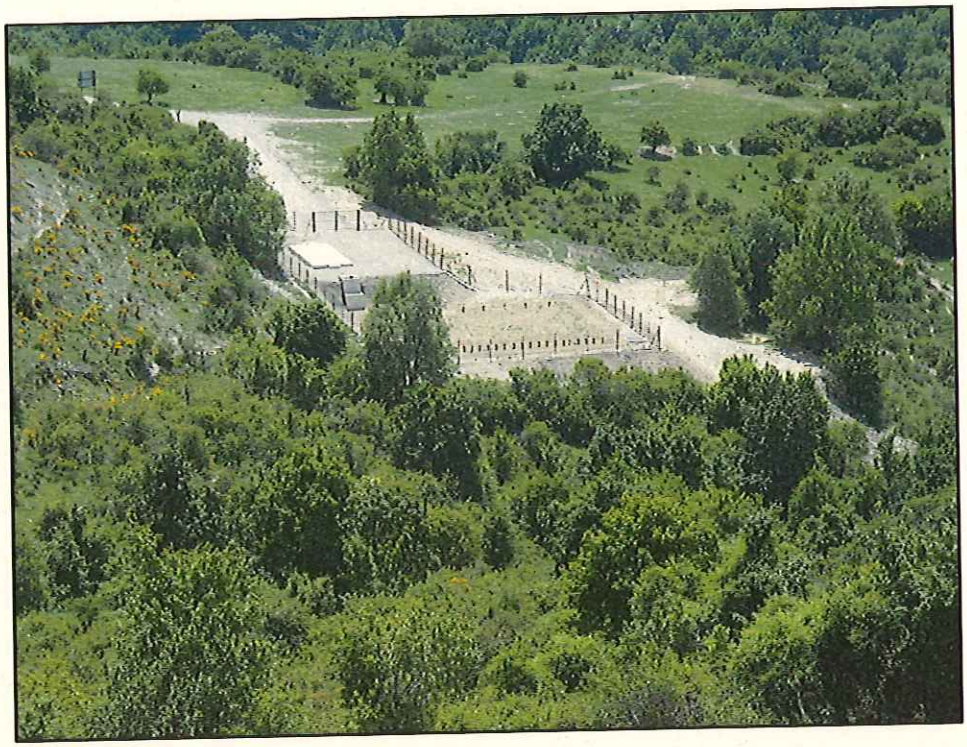
Lagunajes






BARRANCO DE LAS COSTERAS
1 - ALIVIADERO
2 - DESBASTE
3 - ARQUETA DE BOMBEO
4 - REACTOR BIOLÓGICO
5 - DECANTADOR SECUNDARIO
6 - ARQUETA DE AGUA TRATADA
7 - ARQUETA DE BOMBEO DE FANGOS
8 - ESPESADOR DE FANGOS
9 - DESODORIZACION
10 - EDIFICIO DE CONTROL
11 - TRANSFORMADOR
12 - TANQUE DE TORMENTAS
13 - LAGUNAJE
14 - FUTURA AMPLIACION



FOTOGRAFÍAS

Filtro vertical de arena