First day: We will visit several groundwater dependent ecosystems within the Guadalquivir River Basin (GRB). The GRB is an intensively exploited agricultural area with wetlands and increasing groundwater extractions for irrigation of olive groves and highly water-demanding crops such as berry fruits, rice or orange orchards, among others. The first stop will be the largest salt lake in Western Europe, the Fuente de Piedra Salt Lake with 6.8 km length and 2.5 km width. It forms part of a protected wetland at regional (natural reserve), European (special bird protection area) and international (Ramsar site) level and is an ideal nesting area for the pink flamingo (*Phoenicopterus ruber roseus*). A second short stop will be the “campiña” or “countryside” wetland area, a region of numerous small endoreic basins hosting also smaller salt lakes. All these lakes are extremely shallow (less than 1-2 meter depth) with extensions ranging from less than a hectare to more than 15 km². Lunch will take place in our way back to Seville, in the Osuna – Estepa area. Estimated time of arrival: 18:00 h. After the field trip, a night-tour through the old town of Seville (Santa Cruz quarter, Cathedral, etc.) will be offered. A visit to a selection of the best tapas-bars of the city could be the best choice for the journey’s end.

Second day: We will start the field trip in the ground zero of the so-called Aznalcollar Disaster area. On 25 April 1998, a holding dam burst at the Los Frailes mine, near Aznalcollar (Seville), releasing 4–5 million cubic metres of mine tailings. The acidic tailings, which contained dangerous levels of several heavy metals, quickly reached the nearby Agrio River, and then its affluent the River Guadiamar, travelling about 40 kilometres along these waterways before they could be stopped. The toxic spill almost reached Doñana National Park. We will visit the Agrio River alluvial area and the dam where the burst took place, examining the degree of groundwater contamination nowadays. The second stop will be Doñana National Park, one of the largest and richest wildlife reserves and settling areas for migrating waterfowl in Europe. This groundwater dependent wetland area is harmed by intensive irrigation of berry fruits and rice crops, among others and by two major tourist resorts. Such stressors demands precise knowledge of groundwater recharge in the large coastal dune areas for an adequate water management. We will visit a high precision meteo-weighing-lysimeter infrastructure installed in the dune belt, inside the Biological Reserve. Lunch will take place at the traditional pilgrim village El Rocio, situated close to Doñana National Park’s marshlands. The trip will end in Malaga city at c.19:00 h.
Calderon playa-lake flooded in spring (Osuna, Seville)

Proposed itinerary (source: Google Earth)