

DISCLAIMER : Translated from the original Spanish for the Ramsar Bureau (June 2002), and provided to Wetlands International for use in the Ramsar Database. Translation not checked against original by Ramsar Bureau.

## Information Sheet on Ramsar Wetlands

1. Date this sheet was completed/updated: 24 November 1998

2. Country: Bolivia

3. Name of wetland: Laguna Colorada

4. Geographical coordinates:

22° 11' 59" South latitude

67° 49' 10" West longitude

5. Altitude: 4,232 metres

6. Area: 51,318 hectares

7. Overview:

The Laguna Colorada Ramsar site is located in southwestern Bolivia and includes a large part of the lake basin. It coincides with the proposed limits of the Santuario Nacional Laguna Colorada, with an area of 51,318 hectares. The water in Laguna Colorada has a total area of approximately 5,240 hectares. The average altitude of the site is 4,278 metres above sea level. The climate is characterized by low precipitation (65 millimetres annually), a wide daily range of temperature (-25° to +25° C), intense solar radiation, strong winds and low atmospheric pressure (Rocha, 1997). It is a shallow high-Andean-saline lake with an average depth of 50 centimetres. It is at the base of the mountains with ice-covered islands of aragonite, calcite, sulphates, borate and diatomite (Hurlbert and Chang, 1984). The Ramsar site includes the body of water and land around the lake. The water that flows into Laguna Colorada from tributaries has wide variation in its chemical composition. In general, the lake has a high content of soda chloride with very high levels of conductivity and a pH between 5.3 and 9.0. The water in Laguna Colorada is usually reddish-yellow to purple because of fine sediments in this colour range deposited on the surface and a dense population of the flagellate *Dunaliella salina*. However, the colour of the water varies greatly during the day. This variation is probably due to changes in water temperature and solar radiation, because when these factors increase Cyanophyceae algae blooms rich in phycocyanin pigment form that intensify the colour tones of the water, reaching a purple or red-brick colour (Rocha, 1997).

Laguna Colorada is the most important gathering and nesting site for the James's flamingo (*Phoenicopterus jamesi*) at the national and regional levels. The reserve is the habitat for 50 per cent of the established population. It also contains a rich bird

life with more than 40 species of aquatic birds. The red water colour contrasts with the white of the ice islands, creating a spectacular landscape.

8. Wetland type: Ss, U, Zg

9. Ramsar criteria: 1a, 1d, 2a, 2b, 2c, 2d, 3a, 3b, 3c

Criteria that best characterize the site: 1d, 3a, 3c

10. Map of site included? Please tick yes -or- no

11. Name and address of the compiler of this form:

Omar Rocha O.  
José Luis Eyzaguirre R.  
Wildlife Conservation Society-Bolivia  
Casilla 4778  
La Paz, Bolivia  
Tel. and fax: (591 2) 310 262  
E-mail: rocha@cqo.bo

12. Justification of the criteria selected under point 9, on previous page:

Criterion 1a: Because of its origin, the physical and chemical nature of the water of volcanic origin and the ecological relationship between human beings and the environment of Laguna Colorada have created an environment that is unique in the world. Tributaries from Río Sulor and many freshwater thermal springs promote a biological diversity of fauna and flora associated with the water characteristics. Because of the extreme climatic conditions, the plants and animals have adapted during a long period of evolution, developing specific mechanisms that allow them to survive. This has led to high levels of endemism.

Criterion 1d: The red colour of the water and the topography of the ice islands give Laguna Colorada a unique characteristic.

Criteria 2a, 2b, 2c, 2d: Of the six species of flamingos, three are found at Laguna Colorada: the Chilean flamingo (*Phoenicopterus chilensis*), Andean flamingo (*P. andinus*) and the James's flamingo (*P. jamesi*). These three species of flamingo are listed in Appendix I of the CITES Convention. *Phoenicopterus andinus* and *P. jamesi* are considered vulnerable at the world level (Collar et al., 1994; IUCN, 1996) and are also listed in the Red Book of Vertebrates in Bolivia (Rocha and Quiroga, 1996).

In addition, Laguna Colorada is the main nesting centre and concentration for *P. jamesi* at the national and regional levels and is the habitat of about 50 per cent of the established population (Rocha, 1997). As for the bird life, it is possible to observe large concentrations of species of aquatic birds of the genus *Anas recurvirostra andina*, waders such as *Calidris bairdii*, *Phalaropus tricolor* and *Tringa flavipes*, among the most common, all southern migratory species. In addition, there are 40 species of birds including the *suri* (*Pterocnemia pennata*). Furthermore, in the area of influence of Laguna Colorada can be found several plant formations: highly

xerophytic dwarf shrubs mixed with semi-desert species on emerging islands formed by plants and clumps in the river beds, steams and watersheds where there are clumps of grasses growing in semicircles as well as herbaceous grass vegetation and ephemeral grasses. This plant community makes possible the existence of several mammals, such as the vicuna (*Vicugna vicugna*) and the *tojo* (*Ctenomys opimus*), both of biological and economic importance; the first for its fine wool and the second because of its endemism. On the shores of the lake, there are abundant populations of vizcacha (*Lagidium viscaccia*) with more than eight specimens per hectare, and it is very probable to find the Andean cat (*Felis jacobita*).

Criteria 3a, 3b, 3c: At Laguna Colorada, there are mixed reproductive populations of three species of high Andean flamingos, and this is one of the few places where these species interact. This wetland forms the most important nesting and gathering area for *Phoenicopterus jamesi* with sightings of up to 41,000 adult specimens (Hulbert and Flores, 1990) and between 9,000 and 10,000 juveniles during the breeding season (Maier, Kelly and Robinson, 1993; Rocha and Quiroga, 1997).

According to the results of the first international census of *Phoenicopterus jamesi* and *P. andinus* in Argentina, Bolivia, Chile and Peru made in January of 1997, Laguna Colorada is the habitat of 13,400 specimens of *P. jamesi*, representing approximately 43 per cent of the Bolivian population and 30 per cent of the total population reported for this species. As for the *P. andinus*, Laguna Colorada is the habitat of 1,018 specimens, representing five per cent of the Bolivian population and three per cent of the estimated total population of this species (Rocha, 1997b). In summer, Laguna Colorada is the home to about 20,000 flamingos and another 5,000 aquatic birds of several species.

### 13. General location:

Laguna Colorada is located in the southwestern part of the department of Potosí in the province of Sud Lípez on which it depends politically and administratively. It is located 210 kilometres from the city of Uyuni (11,372 inhabitants). It is an important attraction for international tourism because of the Salar de Uyuni (the largest in the world) and the Reserva Nacional de Fauna Andina Eduardo Avaroa (REA). Uyuni is the main point of access to Laguna Colorada by the highway through the small towns of Alota, Ramaditas and Vila Vila.

Laguna Colorada is within the limits of the Reserva de Fauna Andina Eduardo Avaroa (REA), which forms part of the Sistema Nacional de Areas Protegidas (SNAP) and borders on Argentina and Chile. The limits of the Laguna Colorada Ramsar site have a perimeter that is greater than the water area with the objective of protecting a large part of the Laguna Colorada basin. At the same time, the site coincides with the limits proposed for the area of the Santuario Nacional Laguna Colorada.

### 14. Physical features:

From the point of view of geology, Laguna Colorada is located in an area characterized by its landscape, the result of volcanic activity that occurred in the late Tertiary and Quaternary. There are rivers that remain dry for years but which after an occasional rain can carry off large amounts of water that quickly seeps into the

ground. Laguna Colorada is of natural origin and is located in the desert of L pez formed by a group of clay pampas, cracked former lake beds that have dried out, grasslands and dry rivers formed by fine sand from decomposition of volcanic rocks and rocky grasslands formed by clastic rock fragments.

The water of Laguna Colorada and water flowing in from the watershed show noticeable variation in chemical composition. In general, the lake is high in sodium chloride with very high conductivity (Rocha, 1994) and a pH between 5.3 and 9.0 (Maier, Kelly and Robinson, 1993). The minimum temperatures registered in the same body of still water, range between 0  and 5  C, while the maximum reach 22  C. It is a shallow lake with an average of 50 centimetres, and changes in water level follow the pattern of annual rainfall. The water is permanent because of the supply from underground tributaries. The climate of the region is characterized by light precipitation (65 millimetres annually), a wide daily thermal range (-25  to 25  C), intense solar radiation, strong winds and low atmospheric pressure (Rocha, 1997). The rainy season is between December and February with dry months during the rest of the year.

#### 15. Hydrological values:

Laguna Colorada is located within the endorheic basin on the altiplano, which extends over 204,000 square kilometres in Bolivia, Chile and Peru. The region where it is found is characterized by the presence of a large number of saltwater lakes that form small endorheic units. The lake occupies the lowest part of that basin.

Despite a large number of lakes, water resources in the area are very scarce. The lakes are very shallow and their area varies considerably from one season to another and from one year to another, which means they store a relatively small amount of water. The water is slightly basic but reflects a high or very high content of mineral salts and toxic elements above permissible levels. As a result of which many of them are inapt for raising local species of domestic animals. There are no data on the availability of underground water, but the geological and morphological characteristics of the region indicate that this resource is important. As is frequent in regions of volcanic origin, there are hot springs located north of the lake.

The Laguna Colorada basin is located in the province of Sud L pez in the department of Potosi in the cordillera region of the Bolivian Andean system. The area making up the hydrological basin is 1,535 square kilometres at an altitude of 5,205 metres above sea level, with average precipitation of 71.1 millimetres and an average temperature of 2.8  C throughout the year. The Aguaditas, Huayllajara, Pabell n and Sulor rivers empty into Laguna Colorada.

#### 16. Ecological features:

The vegetation is xenophile and grows in certain areas depending on the soil and the presence of water. Several plant formations can be found: dwarf xerophytic scrub on emergent islands forming bush and clumps in the rivers, streams or shores of the lakes where there are springs. On hills and plateaux there are puna grasslands of

clumps of grasses growing in semicircles, as well as herbaceous vegetation and finally saline lakes, emerging islands, grasslands, scrub and rocky areas.

Using physiological criteria and the dominant form of growth, the following types of vegetation are identified:

**Vegetation of rocky areas:** This scattered vegetation grows in cracks and protected places at elevations above 4,600 and 4,900 metres above sea level. The dominant plants are Gramineae of the *Anthochloa*, *Calamagrostis* and *Dielsiochloa* genera. On rocky volcanic hills, there are clumps of *yareta* (*Azorella compacta*) and small communities of *keñua* (*Polylepis tarapacana*), an Andean tree that grows at high altitudes.

**Grasslands:** In grasses are distributed on hillsides and plateaux over a wide range of altitude, there are plants of the dominant species *Festuca orthophylla*, associated with *Calamagrostis* and *Stipa* and low clumps of yellow *Pycnophyllum molle* (García, 1998).

**Wooded grasslands:** These are mixed formations of grassland and shrub with species such as *Adesmia spinosissima*, *Baccharis incarum*, *Calamagrostis*, *Festuca orthophylla*, *Parastrephia lepidophylla*, *P. phyllicaeformis*, *Senecio nutans* and *Stipa*, associated with clumps of cacti (*Opuntia* and *Backebergii*), an endemic that is little known.

**Scrub:** There are scrub areas of evergreen shrubs or *tholares*, formed primarily of *Parastrephia lepidophylla*, *P. lucida* and *P. phyllicaeformis* and more open scrub areas with *Baccharis incarum* and isolated bushes of *Adesmia* and *Lampaya castellani*.

**Emerging islands:** These are formed by hard clumps of the Juncaceae *Distichia muscoides* and *Oxychloe andina* associated with the Gramineae *Calamagrostis*. In the *bofedal* of Laguna Colorada, there are species of *Puccinellia*.

**Communities on saline soils:** In places such as the plateaux west of Laguna Colorada convex clumps of *Anthobryum triandrum* grow. On the shores of Laguna Colorada, there are clumps of *Frankeana* sp.

Because of the extreme climatic conditions around Laguna Colorada, there is no agriculture and also no evidence of introduced plants.

#### 17. Noteworthy flora:

In the Reserva Nacional Eduardo Avaroa, there are endemic high-Andean genera, such as *Anthochloa*, *Distichia*, *Nototriche*, *Oxychloe*, *Pycnophyllum* and *Werneria*, while *Anthobryum*, *Chersodoma*, *Lampaya*, *Oreocereus* and *Parastrephia* are considered genera endemic to the puna (Cabrera and Willink, 1973).

The additional factor of extreme aridity in the area leads to the presence of species endemic to the Atacama puna (Chile), northeastern Argentina and southwestern Bolivia (Navarro, 1993).

The species *Azorella compacta* is considered by Cabrera and Willink (1973) as an important element in the climax community of the high-Andean phytogeographic province. The species subject to intensive exploitation are *yareta* (*Azorella compacta*) and *keñua* (*Polylepis tarapacana*), used as fuel and for construction. The largest demand for fuel comes from the mines, the mining camps and the limestone mills. The sulphur oven uses 12 tons of *yareta* per day (Libermann, 1990). The populations of both species have been affected by long use by man (Ruthsatz, 1983) and by its slow growth rate. Measurements carried out of large clumps of *Azorella compacta* show an average growth rate of 14 millimetres per year (Ralph, 1978 in Martínez, 1989).

For domestic use, the genera *Baccharis* and *Parastrephia*, dominant species in the shrub communities or in the mixed matorrales, but studies are needed to prevent an increase in pressure on this species, if population increases (García, 1998).

## 18. Outstanding fauna

Among the mammals, there are wild and domesticated members of the camel family, such as the vicuña (*Vicugna vicugna*) and llama (*Lama glama*). Although the populations of vicuña are small in comparison with those found farther north. Llamas are numerous in this region because the main economic activity is the raising of llamas. Among the cats, the Andean cat (*Oreailurus jacobita*), found in rocky areas and woodlands of *Polypis*, is considered vulnerable and rare at the world level. Another carnivore found in the area is the Andean wolf (*Pseudalopex culpaeus*), which lives in large populations. A skunk, (*Conepatus chinga*), and the ferret (*Galictis cuja*) are also found. Another element in the rodent population is the vizcacha (*Lagidium viscacia*), which is very abundant in the rocky areas. On the northern shore of Laguna Colorada, the density is estimated to be eight vizcachas per hectare (Gómez, 1998). The *tuco tuco* (*Ctenomys opimus*) is also important because of its endemism.

Birds are the most visible in Laguna Colorada. Among the most important species are the two high-Andean flamingos (*Phoenicopterus andinus* and *P. jamesi*) and the Chilean flamingo (*P. chilensis*). The most abundant of these species is the *P. jamesi* with populations of 12,000 to 14,000 specimens in the summer (Rocha, 1994). This wetland is considered to be the home of more than 50 per cent of the population of *P. jamesi* recorded in Bolivia and 35 to 40 per cent of the global population.

At Laguna Colorada, more than 40 species of birds have been recorded, among them ducks such as *Anas specularioides* (the most abundant in the region), *A. flavirostris*, *A. georgica*, *A. puna* and *Chloephaga melanoptera*. Among the migratory birds from the northern hemisphere are the *Calidris bairdii*, *C. himantopus*, *Hirundo rustica*, *Pluvialis dominica*, *Phalaropus tricolor*, *Tringa flavipes* and *T. melanoleuca*. On the northern shore is found the Darwin's rhea (*Rhea pennata*), a species considered endangered at the international level. Other vulnerable birds are found in the lakes and *bofedales* in the region, namely the *Fulica cornuta* and *Phegornis mitchelli*.

Among the amphibians there are the *Telmatobius huayra* including the small lizards *Liolaemus islugensis erguetae* and *L. jamesi pachecoi*, both endemic to the region.

## 19. Social and cultural values:

History: This area belongs to Los Lípez region, based on the mountain range of that name. Its valleys were affected by mining. The current area of the province of Sud Lípez was the site of one of the most important colonial exploitations of silver in the entire Andean region. At the beginning of the seventeenth century, the mining population of San Antonio de Lípez, whose ruins are the most important colonial mark in the region, once had a larger population than Potosi at that time. It was a trading centre linked with Buenos Aires and Lima that began to decline in mid-eighteenth century.

Despite large gaps in information, it is possible to draw a picture of the region of Los Lípez throughout the colonial and republican period. The northern part is dedicated to agriculture and grazing, in contrast to the southern part, which is used for mining and grazing. Between both extremes, there is a large area of pampas and sandy areas scattered with a thin cover of grasses. In the eastern part of the Middle Los Lípez, grazing is almost the only activity. The enormous salt flat of Salar de Uyuni defines the region of Los Lípez characterized by trade in salt, an important activity for most of the rural population until a few years ago. Caravans of llamas carrying salt is perhaps the outstanding and unique image of this region. The *ayllu caravanero* is the post colonial extension of what was a characteristic of the region in the pre-Hispanic period (Swedforest and Fundación Trópico, 1998).

Archaeology: The first archaeological study of the area was carried out by the British scientist Lawrence Barfield (1961), who explored eight sites around Laguna Colorada and proposed a sequence for his findings that probably date from the palaeo-Indian period up to the European conquest. At the sites, there are traces of pre-Hispanic ceramics in a source of Laguna Colorada, where legitimate artefacts are mixed with “*tiestos atacameños*”, where in addition to cut, bicoloured of the present-day group Mallku Hedionda and “*llamita*” or Inca Pacajes. Throughout the region, there are 54 archaeological sites: from simple isolated structures to built-up sites, such as Llicancabur and Moroco. Most of these archaeological remains are found in a reasonably good conservation status, taking into account degradation due to natural elements. Nonetheless, unregulated tourism and resettlement in the area by local inhabitants pose a potential threat to conservation.

The Reserva Eduardo Avaroa offers many possibilities for archaeological study. These possibilities are increased by the geographical location of the area in the middle of the central southern Andes, which makes it a key element for the study of macro regional dynamics (Swedforest and Fundación Trópico, 1998).

## 20. Land tenure/ownership of:

Laguna Colorada is within the jurisdiction of the Sud Lípez province in the canton of Quetana, the least populated region of Bolivia, where agriculture is non-existent. For this reason, there is no land tenure system for agriculture for the few families living in the area. The livelihood of these families is limited to the herding of llamas and makes possible land use that is basically considered a community property available to everyone. Nonetheless, although the land for grazing llamas is not distributed in plots, there are also no mechanisms for individual and family holdings. Because of

use and tradition over a long period of time, each family roughly recognizes grazing areas that belong to it.

Because this region is an important area for mineral resources, both metallic and non-metallic exploration has increased over the past few years. Very near Laguna Colorada, within the limits of the Reserva de Fauna Andina Eduardo Avaroa, there are several mining operations, most of which exploit deposits of ulexite, sulphur and sodium carbonate.

#### 21. Current land use:

In several places around Laguna Colorada and the *bofedal* of Río Sulor, a tributary of this wetland, there is extensive grazing of llamas, which never exceeds the carrying capacity. Twenty local inhabitants live near the wetland, whose main activity is to offer basic services for tourism in the region and who occasionally take care of their llamas.

Within the Reserva Eduardo Avaroa, there are mining operations, primarily extraction of borax, ulexite, sulphur and sodium carbonate. The herding of llamas is also more intense here.

#### 22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects:

Lack of planning and regulation of large-scale tourism. The influx of tourists to the shores of Laguna Colorada and the circulation of vehicles at high speed creates noise and dust, which affects the behaviour of the fauna in general. The presence of an administration and accommodations for tourism leads to heavy traffic of persons and vehicles in this very fragile area. In addition, there is excessive use of water for the needs of tourist accommodations.

Mining is polluting the water and bofedales, which are drinking spots and habitat for endemic species. There is unconfirmed information concerning pollution of Río Sulor, which empties into Laguna Colorada. This could lead to large changes in wildlife. There is gathering of the eggs of flamingos, rhea, *gallereta cornuda* and other aquatic birds by local inhabitants and poaching of populations of vicuña. A potential threat is the Laguna Colorada geothermic project if this is approved and no mitigation measures are taken.

#### 23. Conservation measures taken:

Laguna Colorada is within the limits of the Reserva de Fauna Andina Eduardo Avaroa, created by Decree 11.231 of 13 December 1973 with the objective of protecting Laguna Colorada and the surrounding area. Later, under Decree 18.431 of 13 December 1981 the limits of the protected area were extended to an area of 714,074 hectares. Despite these legal measures, it was recently incorporated only after 1992 into the Sistema Nacional de Areas Protegidas (SNAP), which provided for effective administration. There is a director, head park ranger, administrator, secretary and 15 park rangers (although insufficient for the large area of the reserve) who follow annual operational plans and present quarterly progress, monitoring and



control reports. Currently, the reserve has a management plan, although it still has not been implemented. The local communities actively participate in management of the reserve in agreement with the management committee for the area, which gives them power of decision for management and conservation of the area. Tourism is now being oriented toward conservation of the wetland. Patrols are being carried out in order to avoid pilferage of flamingo eggs during the breeding season. There is a conservation programme for flamingos on the Bolivian altiplano, where Laguna Colorada is a key site for monitoring populations.

#### 24. Conservation measures proposed but not yet implemented:

As a result of the management of the SNAP and the REA, a management plan prepared by consultants has been approved for the area. The general objective of this plan is conservation of a large number of ecosystems in the arid and semi-arid regions of Bolivia, where there is a rich biodiversity, important wetlands at the continental level, outstanding landscapes with samples of unique and significant geological processes and important vestiges of archaeological and cultural heritage of the region.

This management plan also advocates making Laguna Colorada a national sanctuary; the highest conservation category provided for in the general regulations for protected areas in Bolivia (decree adopted on 31 July 1997). The objective of the declaration of the Laguna Colorada National Sanctuary is to protect the wetland and its surrounding areas because it is a site of high value on the continent as a habitat for migratory and permanent species of special importance for conservation. The sanctuary will protect three species of flamingos that live in the wetland and communities of birds in the area, maintaining intact its physical characteristics, ensuring maintenance of a reference site with its natural conditions and processes, its exceptional scenic value with as little interference as possible in addition to serving as an area for carrying out scientific research and monitoring birds, especially flamingos.

#### 25. Current scientific research and facilities:

At Laguna Colorada, the flamingo populations are monitored as part of the Simultaneous International Surveys of High-Andean Flamingos, coordinated by Argentina, Bolivia, Chile and Peru. In the case of Bolivia, it is supported by the Wildlife Conservation Society (WCS) under the project for conservation of flamingos in the Bolivian altiplano coordinated with the Wildlife Unit of the Dirección General de Biodiversidad. The reserve has a central camp at Laguna Colorada, which is now used to house tourists with a capacity for 40 persons. In addition, there are two basic camps: one at Laguna Verde (on the border with Chile) and another in the town of Quetena. The park rangers stay there for monitoring, control and protecting. The reserve has two offices: one in the city of Potosí and the other in Uyuni, which provide administrative and logistic support for the entire reserve. At the present time, there are no installations available at Laguna Colorada for research.

#### 26. Current conservation education:

Because of the large number of tourists coming from Europe, Asia and neighbouring countries such as Argentina and Chile over the past three years, the Reserva Eduardo Avaroa has tried to channel this casual tourism through the preparation of tourist trails, information pamphlets, posters and signs. This has been inadequate for lack of sufficient resources and a plan for environmental education. However, with approval of the management plan and if financing is obtained for its implementation, there will be a series of programmes for orienting environmental education.

#### 27. Current recreation and tourism:

The Reserva de Fauna Andina Eduardo Avaroa is one of the places of heaviest tourism in Bolivia. Laguna Colorada is included in visits to the Reserva Eduardo Avaroa offered by more than 26 tourist agencies established in the city of Uyuni, Bolivia, and others in San Pedro de Atacama in northern Chile. Attracted by the outstanding scenic beauty of this area, especially Laguna Colorada, the lake receives an average of 800 foreign tourists every month from Europe, Asia and, recently, from Argentina and Chile. In 1997, according to records of the Reserva Eduardo Avaroa, a total of 10,000 tourists visited and this year, including 12,000 visitors to Laguna Colorada (Baez, personal communication).

Currently in Laguna Colorada, there are five hotels with a capacity for 150 persons. Four hotels are owned by members of the local community, and one is owned by the reserve. All the hotels have relatively comfortable public rooms. Tourism at Laguna Colorada involves an element of adventure and is a year-round phenomenon with greatest activity between July and December and peaks in August and September.

Laguna Colorada is a stop on the tourist route beginning in the city of Uyuni. Tourists usually stop there for the night before continuing on. Although there are no recreational activities such as interpretation trails, local museums and observation platforms, adequate infrastructure could be provided if the management plan is implemented. Among other activities, visitors can enjoy the natural landscape, take photographs, observe birds and other fauna and enjoy high-mountain hiking and bicycle riding.

#### 28. Jurisdiction:

Laguna Colorada is located in Bolivia in the department of Potosí under the legal jurisdiction of Sud Lípez province, whose administrative capital is San Pablo de Lípez. Laguna Colorada is within the Reserva Nacional de Fauna Andina Eduardo Avaroa as part of the Sistema Nacional de Areas Protegidas administered by the Servicio Nacional de Areas Protegidas, an independent operational agency of the Ministerio de Desarrollo Sostenible y Planificación.

#### 29. Management authority:

The monitoring and enforcement of the Ramsar Convention in Bolivia is under the jurisdiction of the Ministerio de Desarrollo Sostenible y Planificación, which through the Vice Ministerio de Medio Ambiente, Recursos Naturales y Desarrollo Forestal delegates this function to a technical level the Dirección General de Biodiversidad, whose address is:

Dirección General de Biodiversidad  
Calle Batallón Colorados 24  
Edificio El Condor, page 15, office 1501  
Tel.: (591 2) 31 60 77/37 55 40/36 74 90/31 51 39  
Fax: (591 2) 31 62 30  
La Paz, Bolivia

30. References: