

# **W KEY PRIORITIES**

40,000

43000

PEOPLE AFFECTED

HECTARES DESTROYED

+131

3.3/10

INFORM CLIMATE CHANGE RISK SCORE

# FUNDING AND RESPONSE CAPACITY

- Ministry of the Interior and Public Security
- Chilean National Disaster Prevention and Response Service

#### **CRISIS IMPACT OVERVIEW**

As at 11 February 2024, record-breaking temperatures in Chile had resulted in severe and extended wildfires across the northern regions of Araucanía, Libertador, Los Lagos, Maule, O'Higgins, Santiago Metropolitan, and Valparaíso (ECHO 05/02/2024; SENAPRED accessed 11/02/2024). As at 4 February, the Ministry of the Interior and Public Security reported that 40 fire events were still active among the 165 total, which had destroyed at least 43,000 hectares of land across central and southern Chile (NBC 04/02/2024; LT 04/02/2024). The worsthit area, with at least 8,500 hectares destroyed, was Complejo las Tablas – Reserva Lago Peñuelas (ECHO 05/02/2024; The Guardian 04/02/2024).

According to the Chilean National Disaster Prevention and Response Service, at least 131 people had died and more than 1,100 injured throughout the country as at 11 February, while 300 people were missing in and around Viña del Mar city in Valparaíso (SENAPRED accessed 11/02/2024; The Guardian 06/02/2024).

On 2 February, the President of Chile declared a state of emergency within the affected regions to centralise and expedite resource allocation and ensure that all available aid and support were rapidly directed towards emergency response efforts (Gabriel Boric Font X 03/02/2024). The fires had triggered evacuation across central Chile as at 4 February (NBC 04/02/2024). To curtail looting, the Government had also declared curfews in Viña del Mar and the neighbouring cities of Quilpué and Villa Alemana, where more than 14,000 homes had been destroyed and more than 40,000 people affected (The Guardian 04/02/2024; Reuters 06/02/2024; LT 04/02/2024).

All mass commercial events in Valparaíso were suspended as at 4 February, including sporting, recreational, and cultural events, to focus efforts on the fires (NBC 04/02/2024).

Wildfires are a frequent seasonal hazard between January–March in northern Chile, when the dry season provides favourable conditions for fire spreading. In February 2023, after a record heatwave, fires in the country swept through more than 400,000 hectares and killed more than 22 people (NBC 04/02/2024; Reuters 06/02/2024).

# **Anticipated scope and scale**

According to Chile's Meteorological Directorate, weather forecasts for February and March, 80% of the country is likely to experience above normal temperatures, and most of the country is expected to experience a dry season from January to March, meaning that rainfall will be lower than expected. These conditions exacerbate the risk of forest fires, and the lack of water prevents soil regeneration (DMC 10/02/2024).

Chile's Meteorological Directorate had projected an elevated summertime temperature regime, primarily attributable to the cyclical El Niño weather phenomenon leading to an increase in Pacific Ocean temperatures (Reuters 12/10/2023).

Authorities are concerned about the rapid spread of fire as they are spreading closer to urban areas risking the destruction of housing for at least 15,000 people of which more than 12,000will be Viña del Mar and 2,700 in Quilpué (NBC 04/02/2024; Latercera 04/02/2024).

#### **Humanitarian constraints**

Because of the active status of the wildfires in several regions, access was still a major challenge as at 4 February significantly leading to delayed containment and increased damage (NBC 04/02/2024). Additionally, the wildfires have resulted in power and water cuts; this may affect response by humanitarians (Crisis24 04/02/2024; Bloomberg 04/02/2024).

#### **CRISIS IMPACTS**

### **Shelter**

As at 5 February, wildfires had destroyed more than 14,000 homes in the tourist cities of Viña del Mar and Valparaíso (LT 04/02/2024). Shelter information for the affected population is still unavailable.

#### Health

As at 7 February, the wildfires had killed over 131 people. Many have been injured, although no official numbers are available. Injured individuals require medical attention, which can be strained as a result of overwhelmed healthcare facilities and limited access to specialised care in remote areas (ALA 01/01/2016; Arrizaga et al. 07/2023). The number of affected health centres and hospitals is still unknown.

Besides causing direct burn injuries, wildfires also release smoke and harmful pollutants into the atmosphere, affecting air quality and causing respiratory problems. Children, older people, and individuals with pre-existing health conditions are particularly vulnerable to the impacts of wildfires given their increased susceptibility to health risks.

#### Livelihoods

The wildfires that began intensifying on 2 February are currently affecting two Chilean coastal cities frequented by tourists: Viña del Mar and Valparaíso. These wildfires pose a significant threat to the tourism industry, which is a vital income source for the communities (Reuters 06/02/2024).

In 2023, wildfires destroyed more than 3,700 hectares of farmland, affecting more than 6.000 farmers. Anecdotal reports also pointed to resulting livestock losses, particularly in Araucanía, Biobio, Maule, and Ñuble regions, which the current wildfires are also affecting (Govt..USA 08/03/2023; IFRC 29/08/2023). In central Chile, the planting season for most crops typically starts in September and October after the arrival of the winter rains, meaning the wildfires are destroying maturing crops that would usually be ready for harvest by April (Govt. USA 08/03/2023; PYO accessed 08/02/2024).

#### Impact on critical infrastructure

As at 4 February, the wildfires forced Chile's second-largest oil refinery, Enap, to halt operations. In response, officials of the Aconcagua Refinery on the central coast, which had previously shut down, announced the gradual restarting of its operations (Bloomberg 04/02/2024).

#### **CRISIS DRIVERS**

# El Niño

The cyclical warming phenomenon known as El Niño has a multifaceted impact on the temperature and wildfire risk in Central Chile. While coastal regions experience elevated precipitation, the Andean foothills often encounter paradoxical warming, leading to drier conditions and heightened fire susceptibility. This complex interplay poses significant challenges, as the initial moisture increase stimulates vegetation growth, which ultimately serves as fuel for more intense wildfires when the El Niño influence wanes and aridity returns (UNDRR 24/01/2024; EIU 21/06/2023; OCHA 28/11/2023).

Table 1. Forest fire situation in Chile as at 11 February

REGION	TOTAL FIRES	UNDER Observation	IN Combat	CHECKED	EXTINCT ON THIS DAY	AFFECTED Area (HA)
Araucanía	76	8	8	51	9	3872.27
Aysen	1	-	-	1	-	88.6
Biobio	46	1	6	37	2	474.07
Coquimbo	1	-	-	-	1	0.01
Maule	7	-	-	3	4	6.39
Metropolitan	2	-	-	-	2	1.6
Ñuble	3	-	-	1	2	16.43
O'Higgins	1	-	-	1	-	2.5
The lakes	7	1	-	6	-	1825.12
Valparaiso	9	-	2	1	6	8792.15
Total	153	10	16	101	26	15079.14

Source: CONAF (accessed 12/02/2024)

# **COMPOUNDING/AGGRAVATING FACTORS**

# **Recurrent droughts**

Since 2010, Chile has been facing recurrent and severe droughts, largely attributed to climate change, which have increased fire susceptibility (Cortina and Madeira 03/03/2023). This has resulted in some of the most devastating wildfires the nation has ever witnessed, causing widespread destruction and significant loss of life (ICN 09/04/2023; BBC 25/01/2017).

Several factors converge to create the current critical situation. El Niño, which started in June 2023, has worsened the current drought. Climate change has intensified the effects of El Niño and lengthened the duration of fire seasons worldwide by almost 20% compared to the late 1970s. Heavy precipitation in 2023 also fostered abundant vegetation, which is fuelling the current fires. This confluence of circumstances has established an environment where fires easily ignite and spread rapidly (Cordero et al. 23/01/2024; van Dongen et al. 05/12/2022; Jolly et al. 14/07/2015).

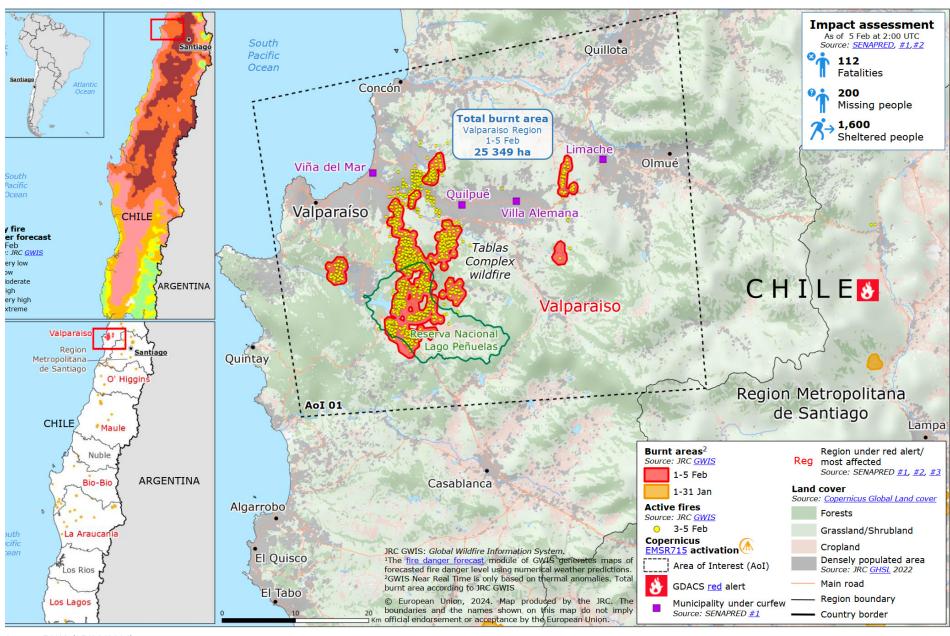
# **FUNDING AND RESPONSE CAPACITY**

According to authorities, at least 1,400 firefighters and 1,300 military personnel, as well as 31 firefighting helicopters and aeroplanes, had been deployed to fight the fires as at 5 February (Al Jazeera 05/02/2024).

The Ministry of Finance mentioned on 4 February that reconstruction efforts would cost hundreds of millions of US dollars (Bloomberg 04/02/2024).

Esval, a Chile-based water utilities company, is working to stabilise services to supply and boost water in fire zones (NBC 04/02/2024).

# IMPACT OF THE WILDFIRES IN CENTRAL CHILE AS AT 5 FEBRUARY



Source: ECHO (05/02/2024)