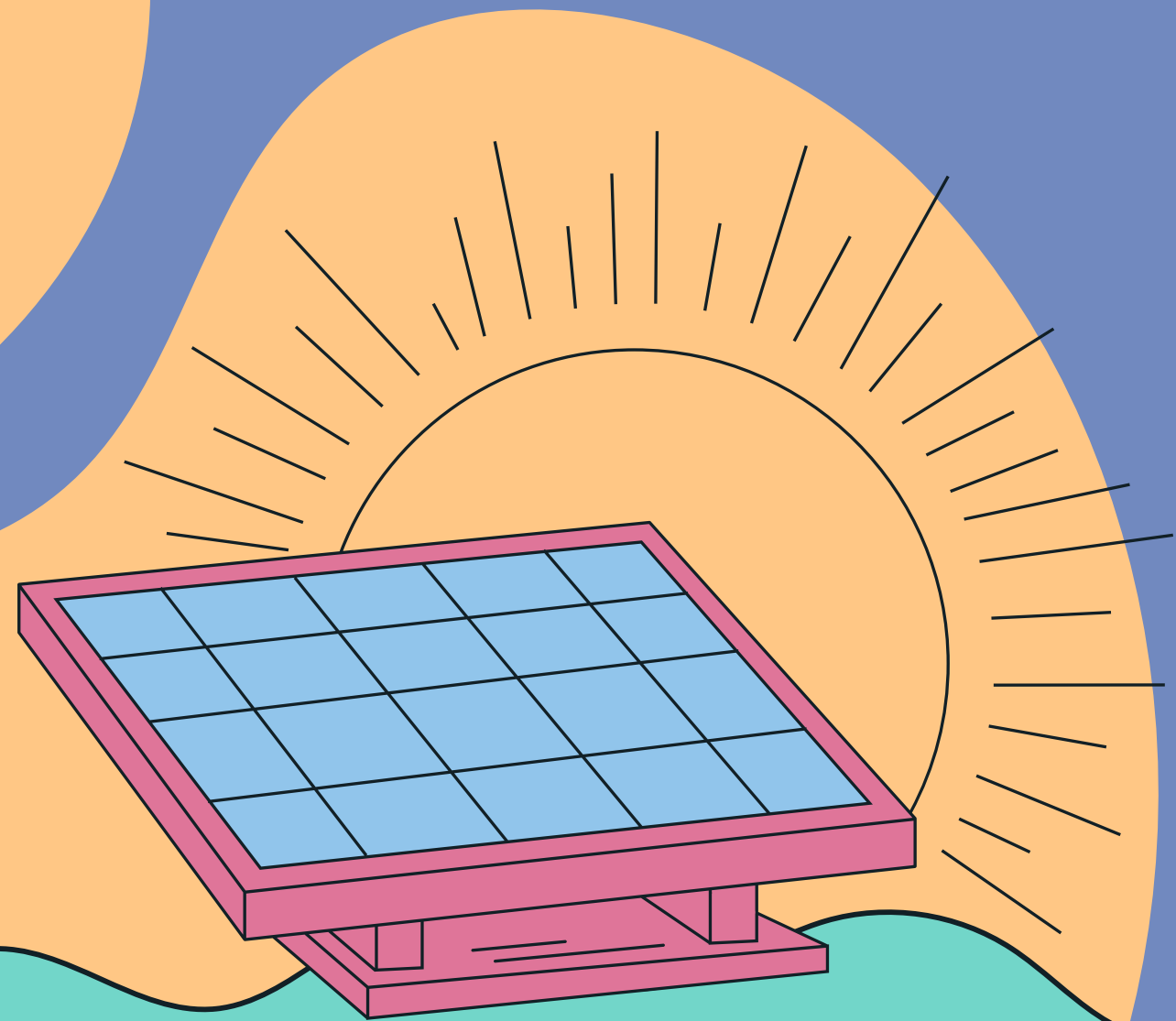
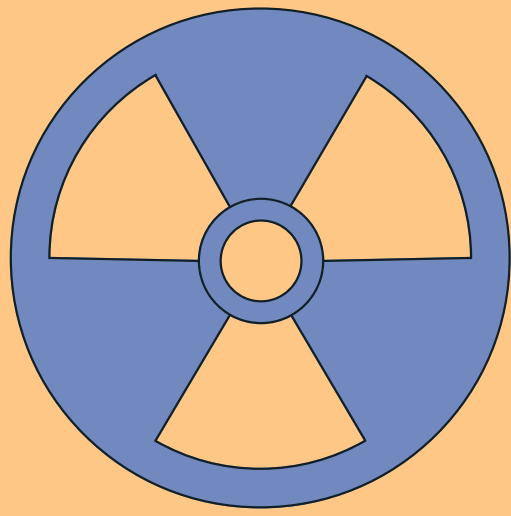




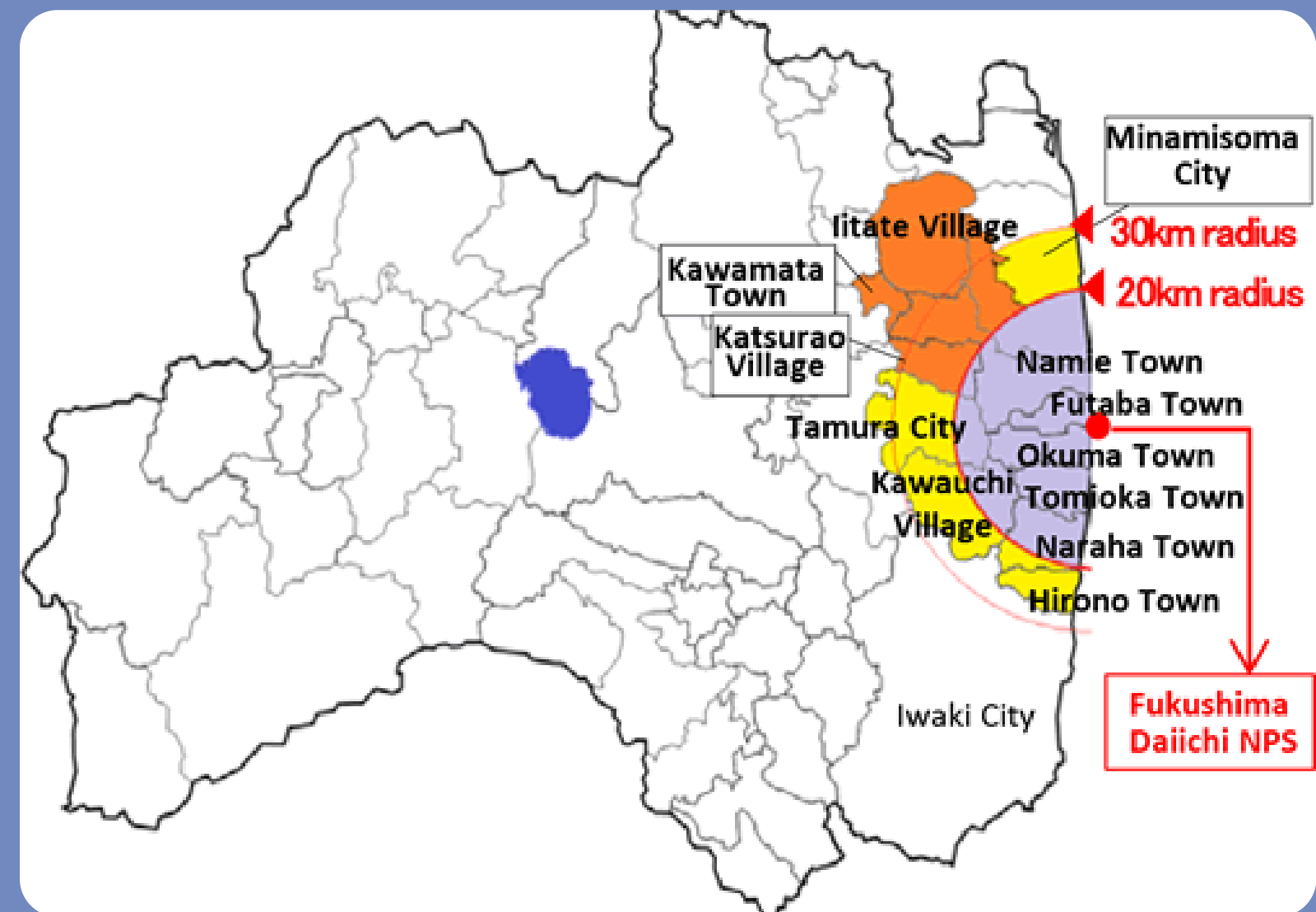
People of Ōkuma

**A LIFE OF
UNCERTAINTY AND
CONSTANT PROGRESS**

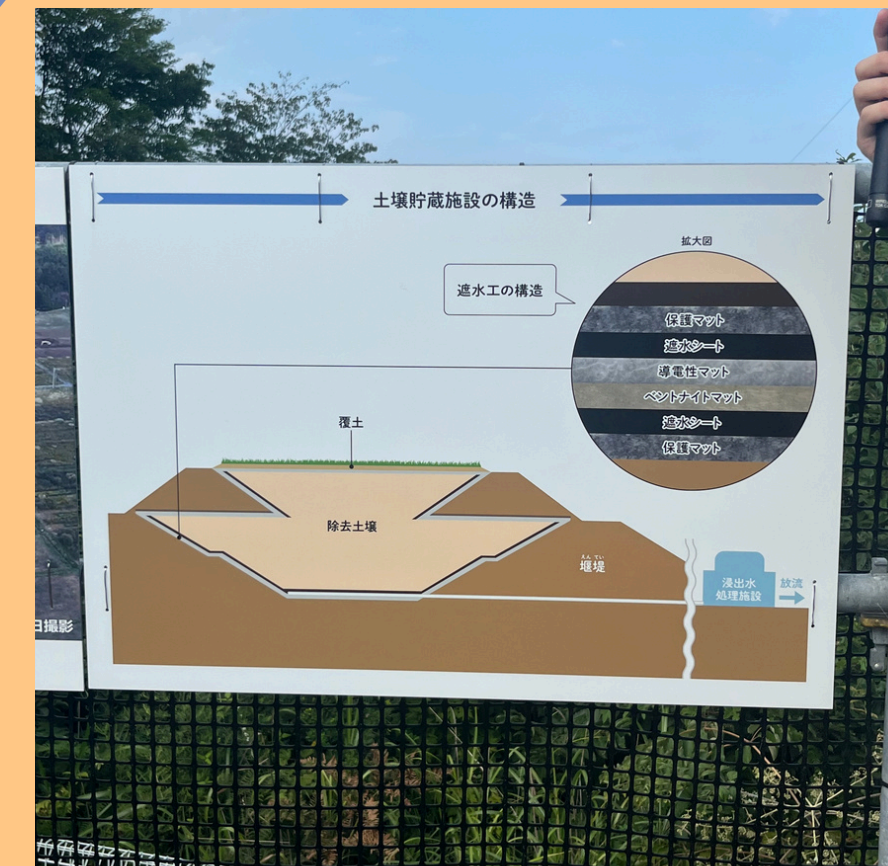
Evacuation

A chaotic situation, but a strong sense of community

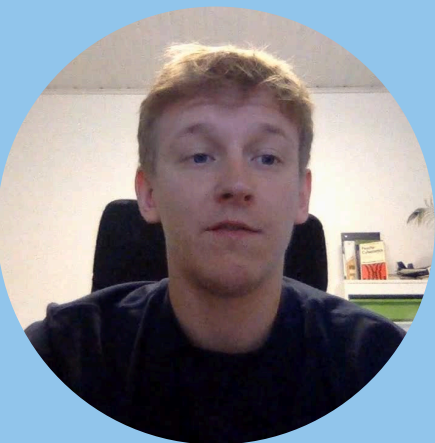
- March 2011: Emergency evacuation of Ōkuma
- Amid the chaos, some people were left behind or were not informed of the evacuation
- 43 residents returned to check on each house
- Buses originally scheduled for Ōkuma and Futaba were ultimately rerouted to Ōkuma



Decontamination of radioactive soil



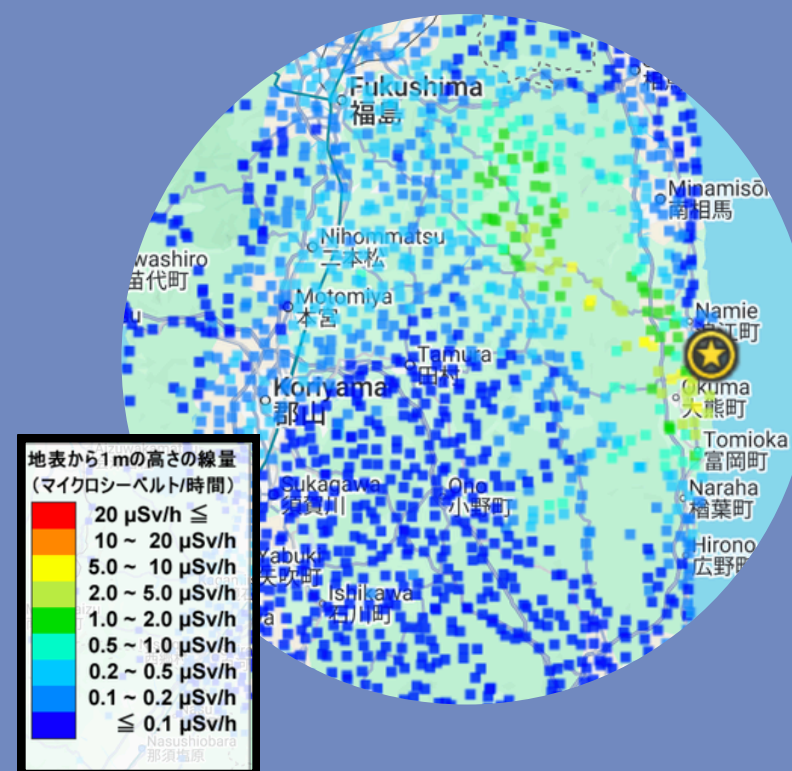
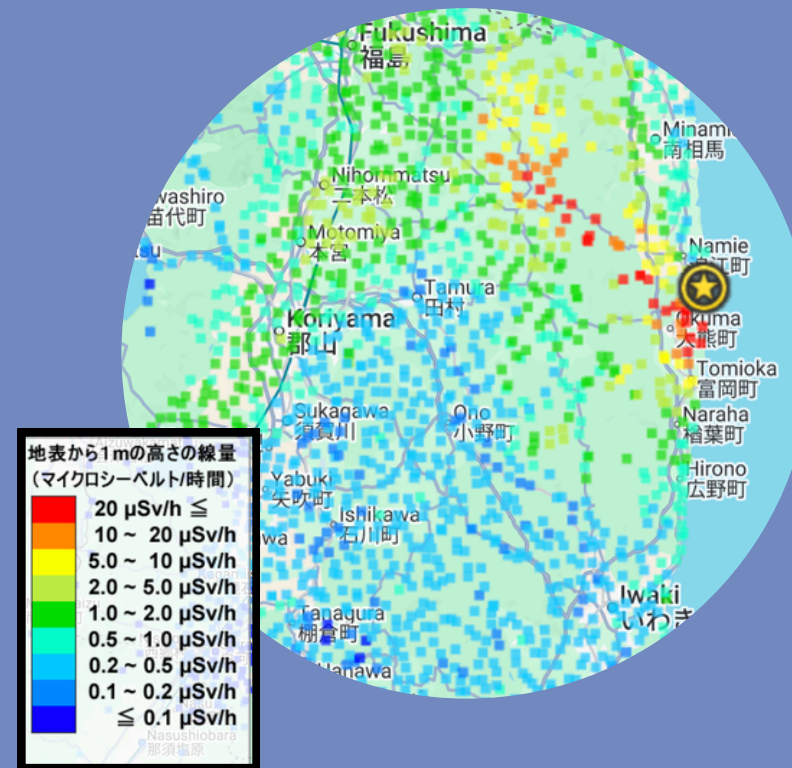
- Continuing decontamination efforts in the power plant and surrounding affected areas
- A political debate has been sparked by the decontamination of Okuma with the storage facility set to be returned to the community by 2045



Environmental radiation in Ōkuma

Decreasing radioactivity contamination

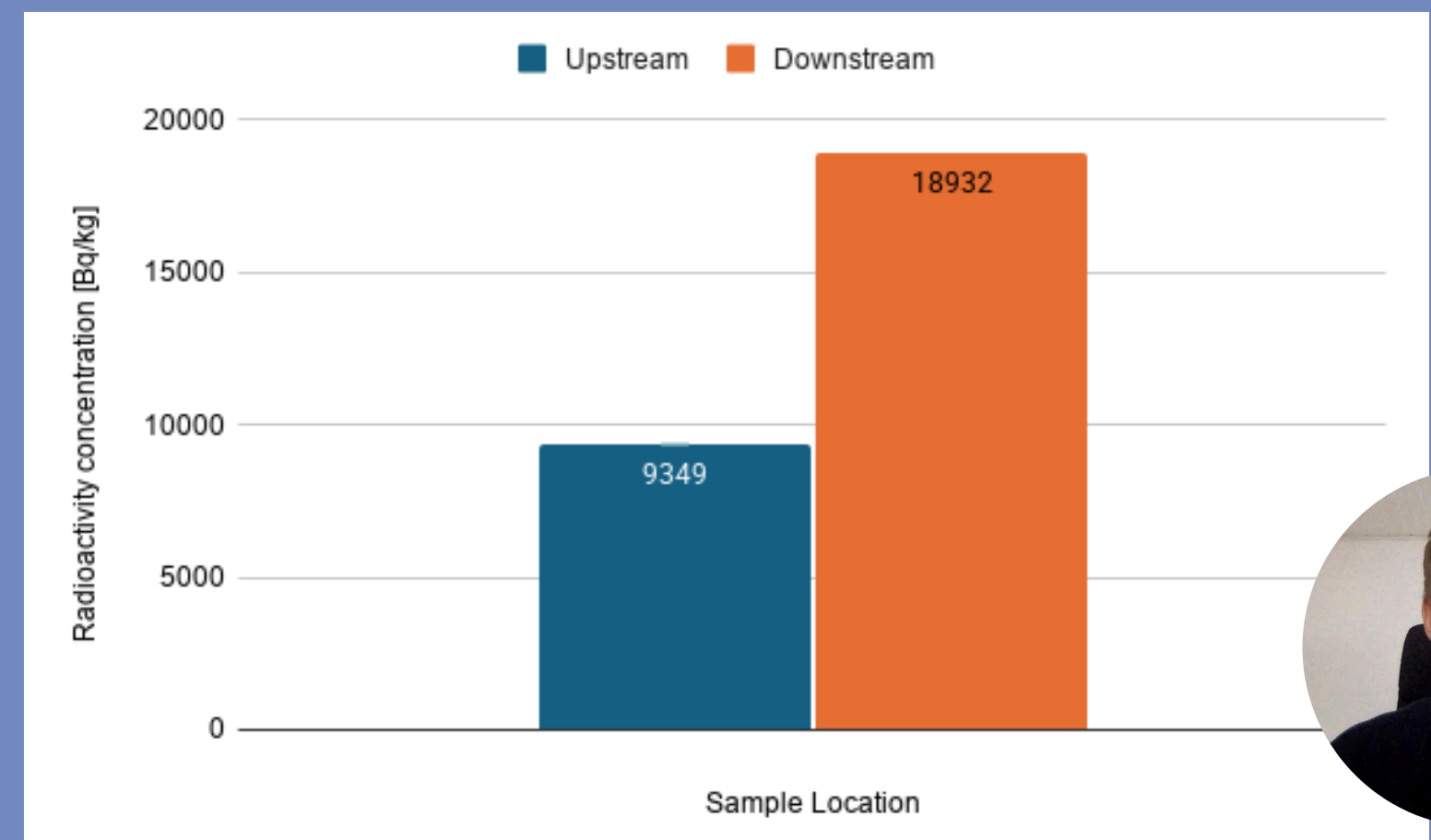
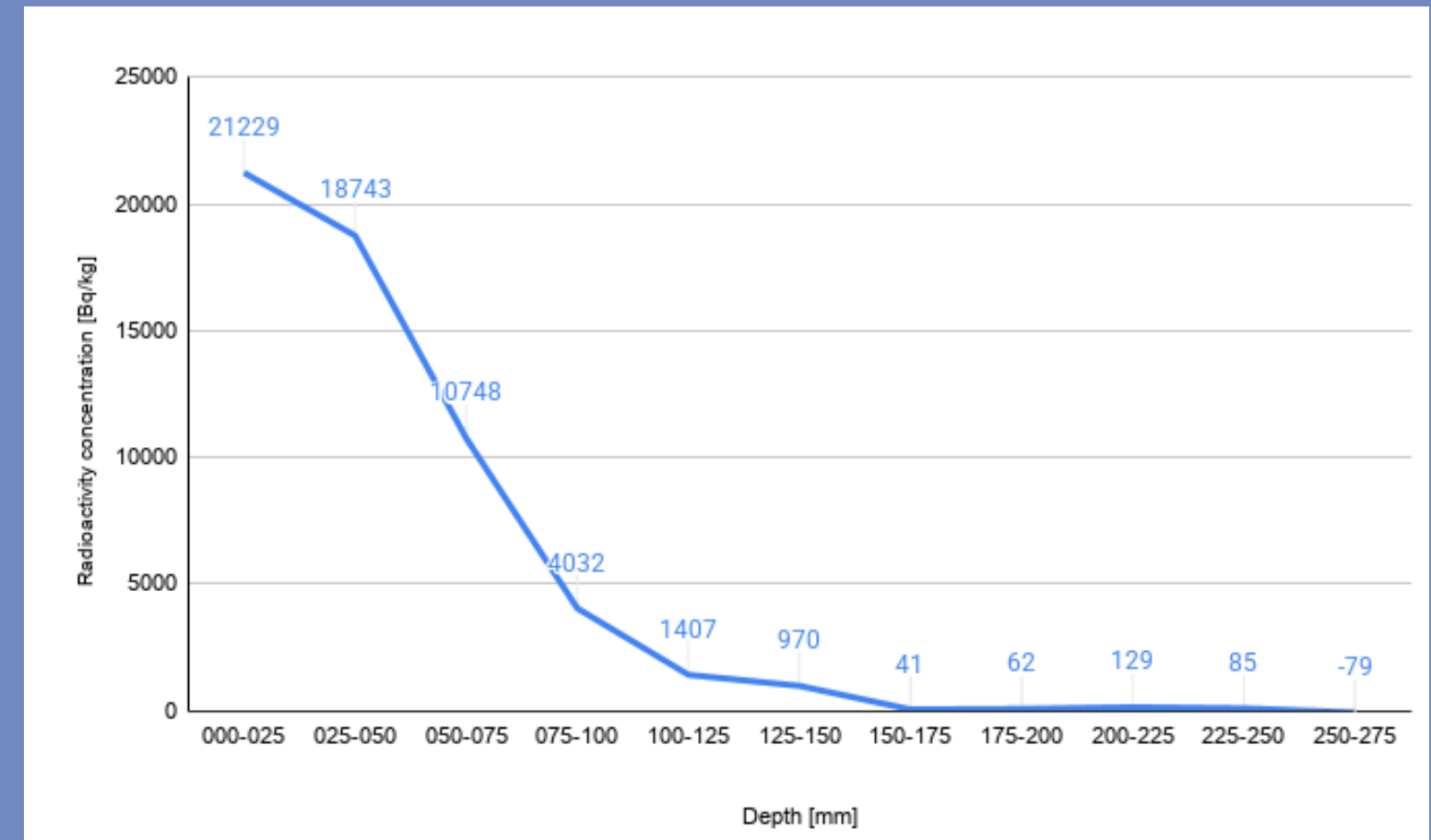
- Decontamination of residential/urban areas (outside the difficult-to-return zones) was declared complete in 2018
- Forests in Ōkuma tell a different story - due to the fallout in Fukushima Prefecture, radiocesium accumulated in tree bark, leaves, and the surface soil layer and fields.
- Annual measurements also show an overall decrease in radioactivity concentration over the last 15 years that sparks hope that areas can be inhabited again in the future!



Environmental radiation in Ōkuma

Results of sample collection

- Our group took samples at Jigokuzawa
- We wanted to investigate the effect of water flow on the distribution of Caesium-137
- We took 5cm and leaf samples upstream and downstream to do this. We additionally took a 30cm soil sample to see how it changes with depth
- The line graph shows the concentration of Caesium-137 in the 30cm soil sample at 5cm intervals
- The bar graph shows the concentration of Caesium-137 in the 5cm samples



Limited Return of the Population



- March 2011: ~11,500 residents in Ōkuma
- Today, only ~400 former residents have returned
→ ~3.5% of the pre-2011 population
- Many evacuees have rebuilt their lives elsewhere and no longer wish to return

After 15 years, the needs of former residents have also changed
E.g., Ms. Tomoko Nemoto: living in Ibaraki city due to insufficient hospital infrastructure
→ Adapt the town to new needs to enable a more inclusive return

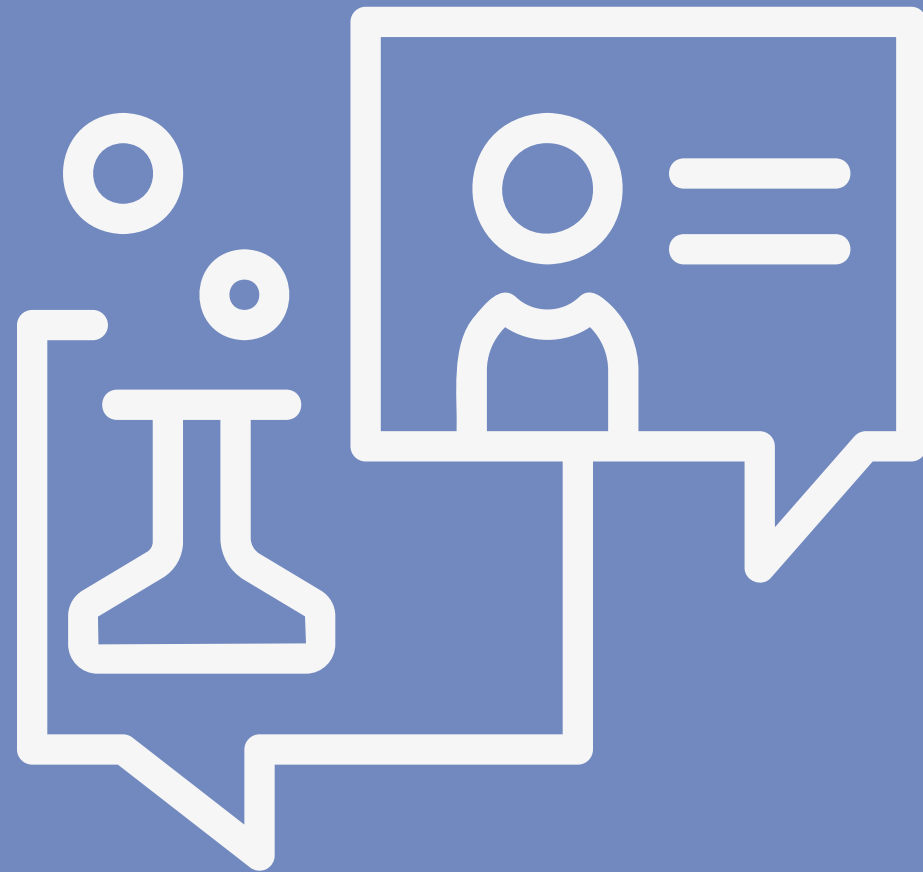
Rebuilding a Community



- From **The Ministry of Environment**: Bringing people back to Okuma is a lot more challenging than securing funding.
- There are people who have started new lives elsewhere, and people who want to come back but cannot do so due to a lack of infrastructure, such as hospitals, jobs...
- There is also general skepticism in the area's safety.

Relevant governing ministries need to think in the long term and hold frequent comprehensive dialogue sessions with both current residents of Okuma and former residents to establish and address their needs and concerns.

Science Communication



Past

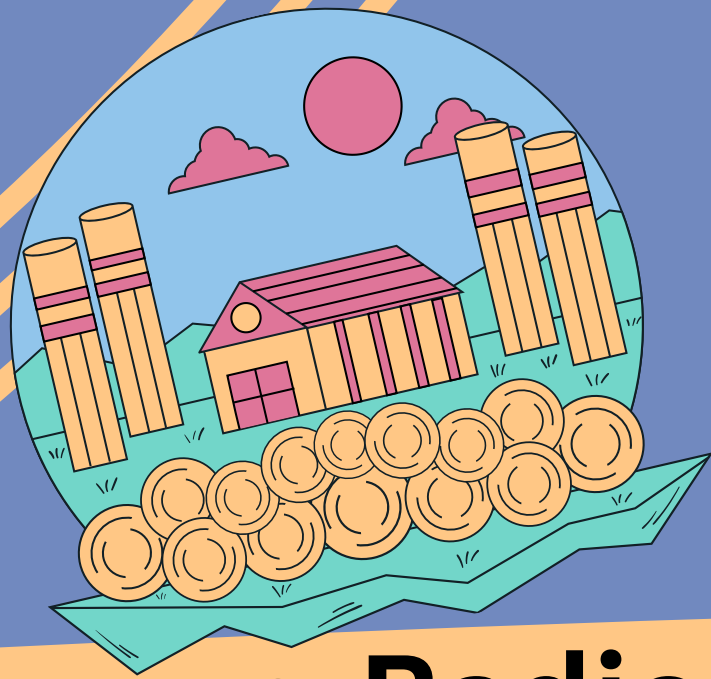
- People were unaware of what radiation is
- There was a lot of confusion due to miscommunication and misinformation, which caused distrust

Present

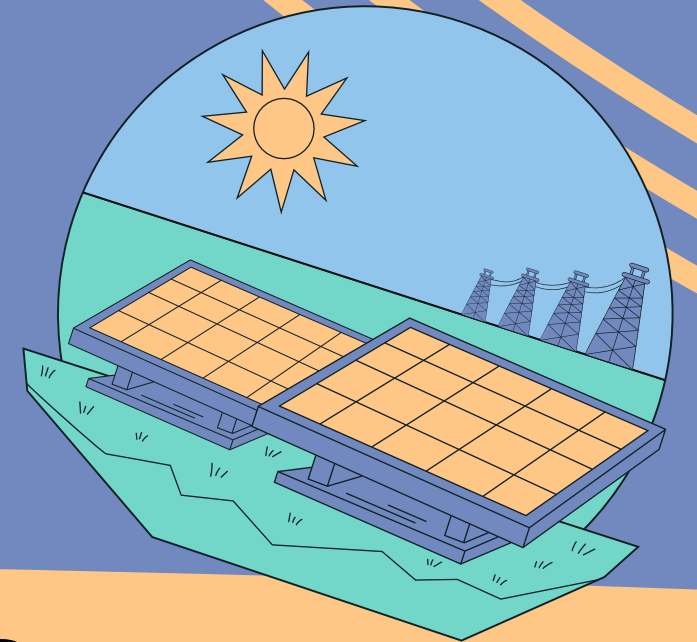
- A lot of effort has been given to educating people about radiation
- We learnt that we must effectively communicate during disasters
- BOSAI system was overhauled

Future

- Continuous development of communication systems and methods
- Create awareness of alternative energy production methods
- Involve the community in decision making



Summary



- **Radiological Progress & Ongoing Challenges**

Decontamination in residential zones have officially concluded and background radiation continue to fall, but “**difficult-to-return**” zones remain contaminated. Interim soil storage and long-term land management issues remain critical.

- **The Reality of Demographic Recovery**

From the ~1,200 current residents, only ~400 are original returnees (just ~3.5% of the town's pre-2011 population 11,500). Most former residents have **found new roots elsewhere**, or express concern over the lack critical local infrastructure like adequate healthcare and jobs.

- **Evolving Science & Risk Communication**

Clear disaster communication and continuing to educate the public are a must for **overcoming persistent misinformation** and **rebuilding trust**.



Conclusion



Long-Term Dialogue & Adaptation

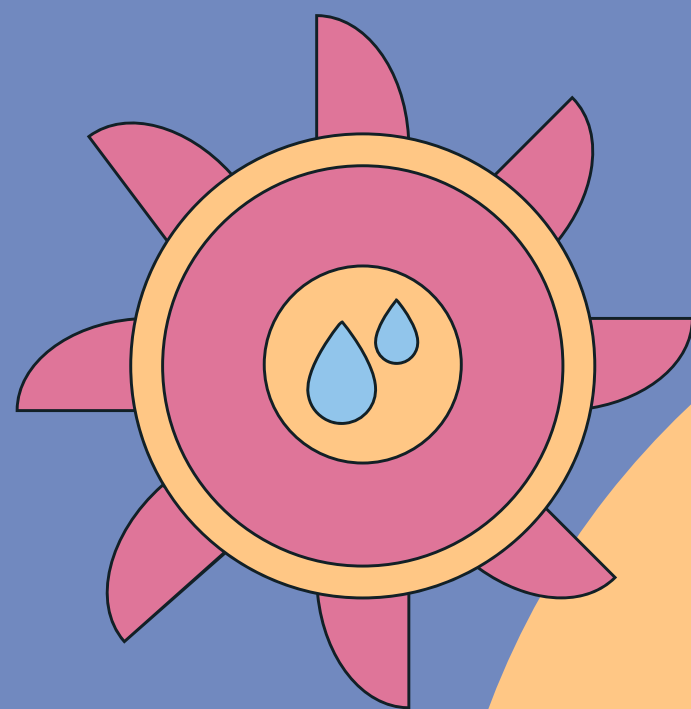
Revitalization is **not as simple as** total land area decontaminated or how many houses were built, but rather it is a **multi-faceted challenge** spanning social, economic, and political issues.

Beyond Physical Reconstruction

Demographic recovery efforts does not lie solely on returnees. But rather building an inclusive and forward-looking community should be **top priority** to **connect** both returnees and newcomers.

Reframing Okuma's Community

Sustainable recovery also requires ongoing community engagement, by adjusting public services to current residents' needs while keeping everyone **accurately educated**.



Thank you!

