

Nozawa Onsen Village

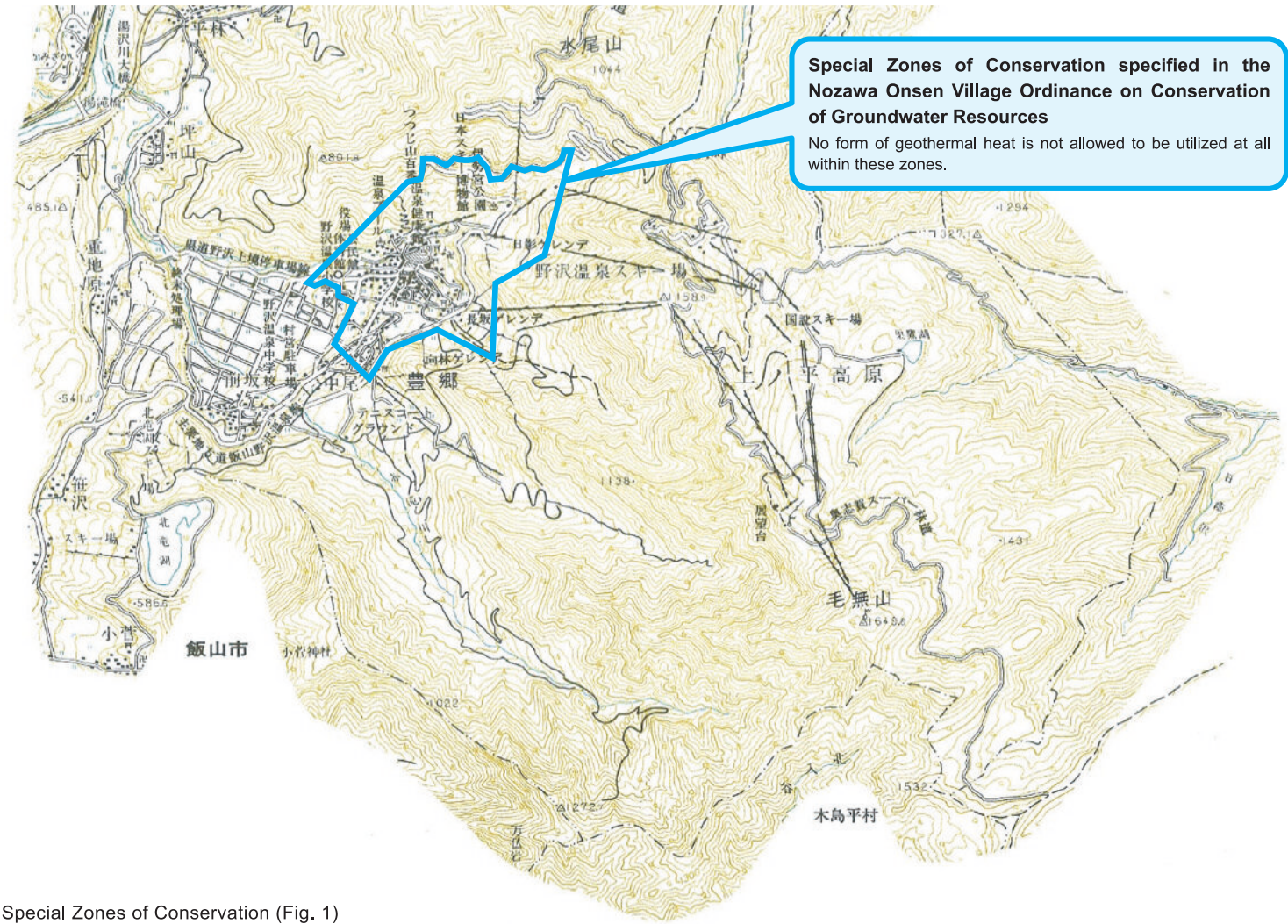
Established Ordinance of Geothermal Heat Utilization

Geothermal heat is one of the environmentally friendly renewable energy sources, with great potential. However, hot springs and groundwater are precious, irreplaceable treasures to us, and the local people. The side-effects of geothermal heat utilization on our precious hot springs and groundwater are still unclear. Nozawa Onsen Village has established regulations on the use of geothermal heat in the form of an ordinance, in order to protect our hot springs and groundwater, along with our way of life. The ordinance is scheduled to come into effect on April 1, 2024.

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Approval criteria of geothermal heat utilization

- ①No geothermal resources are permitted to be used from within the ‘Special Zones of Conservation’ (Fig. 1) specified in the Nozawa Onsen Village Ordinance on Conservation of Groundwater Resources.
- ②Geothermal heat from within the entire Nozawa Onsen Village area, except in zones specified as Special Zone of Conservation, is not allowed to be utilized with the Open Loop system (Fig. 2 [2]), which means that groundwater is pumped up.
- ③Systems to utilize geothermal heat must be the Closed Loop system (Fig. 2 [1]), and geothermal heat exchangers shall be placed at or above the level of the groundwater table not below.
- ④You are required to; 1) have a geological investigation conducted, 2) submit an application form, and 3) acquire the Mayor’s approval, prior to utilizing geothermal heat. (Please refer to the right of this sheet for details on the application process.)



Special Zones of Conservation (Fig. 1)

System Name	Heat pump system (Closed-loop)	Heat pump system (Open-loop)
Chart	Fig. 2 (1) Circulating water and antifreeze solution 	Fig. 2 (2) Using groundwater
Description	Exchanging heat with a heat pump by circulating solution like antifreeze into a heat exchanger installed under the ground	Using pumped-up groundwater for heat exchange with a heat pump, and then returning used groundwater underground with a reductor

How to utilize geothermal heat (Fig. 2)

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Application procedure for geothermal heat utilization permit

①Submit a notification of intent to conduct a preliminary geological investigation to the mayor at least 30 days before the preliminary geological investigation.

②Submit an application form to obtain the Mayor’s approval of construction to install a geothermal-heat utilization facility, along with a report of the preliminary geological investigation described above at 1), at least 120 days before installation of a geothermal-heat utilization facility begins.

③The mayor will decide on approval or disapproval within 90 days from the submission as described above in 2).

④Upon completion of the geothermal-heat facility construction after the mayor’s approval , you are required to submit a notification of construction completion within 15 days.

⑤You shall undergo an inspection by order of the mayor for compliance conditions.

Flow of procedure to utilize geothermal heat

①Submit a notice of intent to conduct a preliminary geological investigation (At least 30 days before the investigation)

Conduct the preliminary geological investigation

②Submit an application form to obtain a construction approval (At least 120 days before installation construction)

③Receive a decision of approval or disapproval (within 90 days from the application)

Start installation construction

④Submit a notice of construction completion on the geothermal-heat utilization facility (within 15 days from the completion)

⑤Undergo an inspection for compliance, upon which;

Start of geothermal heat utilization

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How to utilize geothermal heat

- ①For those who already have a geothermal-heat utilization facility, you shall submit a notice within 60 days from the date when the ordinance becomes effective (April 1, 2024).
- ②For those who already have the approval to utilize geothermal heat, you are required to have the facility inspected by order of the mayor once every five years, to check whether the facility remains compliant.
- ③For those who have discontinued, or are planning to discontinue the facility, you are required to restore the site to its original state, and give notice to the mayor.
- ④The mayor may give an advisory or an order to take necessary action to those who utilize geothermal heat, in order to conserve groundwater sources. If you do not follow his or her advisory or order, the mayor may give an order to temporarily discontinue the facility.
- ⑤Please contact the department below for the details about the procedure.

Contact

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