



Nintoku-tenno-ryo Kofun surrounded by numerous smaller tombs
A virtual reconstruction combined with a modern aerial photograph

Chapter 4

State of Conservation and Factors Affecting the Property

4.a Present State of Conservation

4.b Factors Affecting the Property



4. State of Conservation and Factors Affecting the Property

4.a Present State of Conservation

(i) The property's state of conservation

The nominated property is a serial property consisting of 45 component parts, each appropriately managed by the national government, local governments or private owners. The overall state of conservation is good.

The component parts, categorized as *Ryobo*, are the resting places of the Emperors and other members of the Imperial Family. Some *Ryobo* have places of worship. General entry into the sites is in principle prohibited except for Imperial Household Agency staff conducting regular patrols to monitor the state of conservation. Therefore, there is no possibility of human-induced impact on the component parts of the property.

The component parts other than *Ryobo* are managed by the local municipalities and private owners in accordance with the individual preservation and management plans that are designed under the Law for the Protection of Cultural Properties. Alteration of the existing state of the sites is prohibited in principle. Even when conducting any repairs or improvement work necessary for the conservation of the property, one must go through a strict review process to obtain prior permission from the national government (Commissioner for Cultural Affairs). Thus, the component parts of the property are not negatively affected.

All of the component parts are mounded tombs, and the mounds and moats are constantly monitored for any collapses and changes in shape. Similarly, the condition of the trees on the mounds and moat water is also constantly observed (see [Appendix 1.b](#) "Summaries for property management plans specific each component part"). The state of vegetation on the mounds differ from component to component. Concerning components on which trees grow

too vigorously, trimming and pruning are carried out as necessary to ensure the conservation of archaeological features. Thus, they are maintained in a good state. As for those with a surrounding moat, the shoreline at the foot of the mound is closely monitored for erosion caused by the moat water. Where necessary, conservation measures are taken to protect the mounds from being affected, thereby the appropriate state of conservation is maintained.

Any projects involving acts taking place on the mounds and in the surrounding moats that could have a negative impact on the property are assessed prior to their commencement, in view of protecting the Outstanding Universal Value so that the property remains in an appropriate state of conservation and will be perpetually handed down to subsequent generations in good condition.

(ii) Methods for day-to-day management of the component parts

For the day-to-day management of the component parts, each management authority makes patrols and monitors the condition of the component parts. Management is conducted according to the following standards:

Vegetation

In principle, trees on the mounds are maintained in their current state. In cases where the mounds and the surrounding buildings are affected by falling trees, withered trees are cut and trimmed, and hazardous trees are removed. In cases where overgrown trees interfere with the undergrowth, the trees are pruned. Concerning component parts with a moat filled with water, overgrown aquatic plants are removed.

Moat water

Protective measures are in place for kofun that have moats filled with water, which have the potential for erosion caused by water level fluctuation, wind and waves. The water level on the mounds and the banks is monitored and controlled, and embankment work is considered and implemented. As for measures against pollution caused by stagnant water and the inflow of residential runoff, the municipalities concerned conduct water quality examinations and are considering sewage improvement and the induction of well water.

Water quality examinations are continuously implemented by the municipalities concerned (Sakai, Habikino and Fujiidera City Governments) at the kofun designated as Historic Site¹.

1. At *Ryobo* sites, the municipalities concerned collaborated in a pilot water quality examination, and they are now discussing with the Imperial Household Agency to build a permanent collaboration scheme.

Facilities for management and rituals

The Imperial Household Agency maintains and manages the subsidiary facilities of *Ryobo* comprising: places of worship (*torii* gates, lanterns, gates, stone fences, wash basins, etc.); management facilities of the component parts (management offices, fences, notice boards and caution signs); and management facilities of moat water (sluice gates and spillways). As for Historic Sites, on the other hand, the manager of each component part maintains and oversees the management facilities (fences and signposts). In addition to such day-to-day management, the managers conduct renewal or improvement works of the facilities to maintain their function. As a requirement of conducting such works, it is necessary to eliminate any risk of impacting the archaeological features and artifacts buried underground, and to ensure that the design does not interfere with the view of the mounded tombs. The managers draw up a plan to meet the above-mentioned conditions and undergo a procedure of “the alteration of the existing state” in accordance with the 1950 Law for the Protection of Cultural Properties. The plan is executed once permission is granted.

(iii) Component parts’ state of conservation

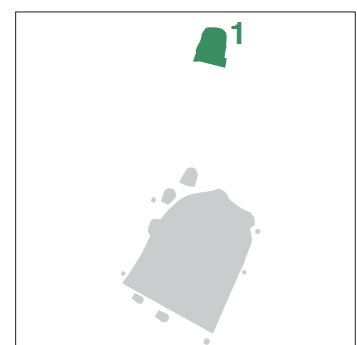
Some of the tombs, as component parts, are covered with trees, appearing like giant hills, while others have a familiar appearance, like artificial mounds in a park. The present state of conservation of the individual component parts is as follows (See [ANNEX of the Appendix 1.a](#) “Comprehensive Management Plan”, [3.d](#) “History of excavations at the component parts” and [4.b](#) “History of improvement works at the component parts”):

Component part 1: Hanzei-tenno-ryo Kofun

Hanzei-tenno-ryo Kofun is a keyhole-shaped kofun located in the northern end of the Mozu area and managed as a *Ryobo* by the Imperial Household Agency. Apart from the worship area comprised of the place of worship and its approaching path, the public’s entry into the kofun is essentially prohibited. Therefore, there is no possibility of human-induced impact on the mound. The mound and the moat remain in good condition.

The moat is filled with water, but the mound itself has been unaffected so far. The water level is monitored particularly closely during rainfalls, as there are no means for water to flow in or out of the moat.

Trees covering the mound may affect the site, therefore, the tree conditions are monitored by regular patrols so that dead or damaged trees can be detected. As for the trees on the bank, in addition to the felling of dead and damaged ones, those which pose a threat to neighboring land are removed immediately.



Within the site, there are facilities for worship such as a *torii* gate, lanterns, gates and stone fences; and a guard station and fences required for site management. Repairs and reconstructions of such facilities are implemented as required to maintain ritual and management functions, however, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 2: Nintoku-tenno-ryo Kofun, Chayama Kofun and Daianjiyama Kofun

Nintoku-tenno-ryo Kofun is a keyhole-shaped kofun located in the center of the Mozu area and managed as a *Ryobo* by the Imperial Household Agency. Excluding the place of worship and its approaching path, entry into the site is prohibited and is subject to strict management, so there is no possibility of human-induced impact on the mound. Some erosion along the foot of the mound and the bank caused by the moat water has been identified, but the mound and moat remain generally in good condition.

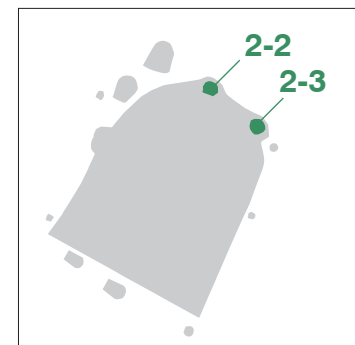
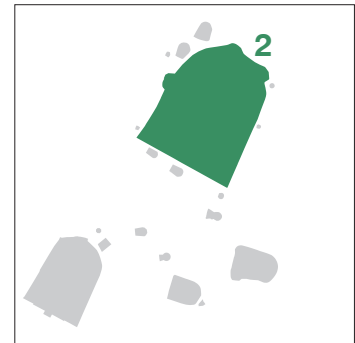
The triple moat of Nintoku-tenno-ryo Kofun is filled with water. Due to concerns about flooding when the water level increases, special attention is paid to parts near the spillway during patrols. This way, the moat water is prevented from damaging the site.

As for trees on the mound, dead and withered trees are identified and removed by regular patrols to avoid damage to the archaeological features from falling trees. Apart from this, foliage thinning such as the removal of miscellaneous small trees is carried out.

Within the site, there are facilities for worship such as a *torii* gate, lanterns, gates, and stone fences, as well as a guard station and fences required for site management.

Repairs and reconstructions are carried out as required to maintain ritual and management functions, however, construction methods are selected to prevent impact on the archaeological features and with due consideration of the landscape. Furthermore, trees on the bank and at the place of worship of Nintoku-tenno-ryo Kofun are regularly maintained and chemically sprayed.

With regard to Chayama Kofun and Daianjiyama Kofun located on the bank of Nintoku-tenno-ryo Kofun, regular patrols determine the condition of trees on the mounds, and decayed trees are removed. Entry into the mounds is prohibited and strict management is conducted. The mounds remain in good condition.

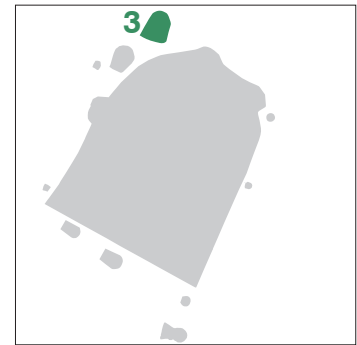


Component part 3: Nagayama Kofun

Nagayama Kofun is a keyhole-shaped kofun located on the north side of Nintoku-tenno-ryo Kofun. The mound is managed as a *Ryobo* by the Imperial Household Agency, and the moat is managed as a Historic Site by the Sakai City Government.

The moat is filled with water and some erosion along the foot of the mound has been identified. Entry into the mound is prohibited, therefore, there is no possibility of human-induced impact on the mound. The mound and the moat remain generally in good condition.

As for trees on the mound, dead and withered ones are identified and removed by regular patrols to prevent any damage to the archaeological features from falling trees.



Component part 4: Genemonyama Kofun

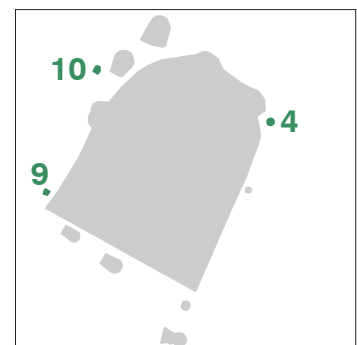
Component part 9: Dogameyama Kofun

Component part 10: Komoyamazuka Kofun

These three mounded tombs (Genemonyama Kofun as a round kofun; Dogameyama Kofun as a square kofun; and Komoyamazuka Kofun as a scallop-shaped kofun) are located in the vicinity of Nintoku-tenno-ryo Kofun and are managed by the Imperial Household Agency as *Ryobo*. Subject to strict management, entry into these sites is essentially prohibited. The remaining mounds are in good condition.

Trees on these mounds are predicted to exert some negative impacts, therefore, regular patrols are carried out to identify and remove any withered trees. Any hazardous trees that may potentially affect neighboring residences are similarly identified by patrols and removed.

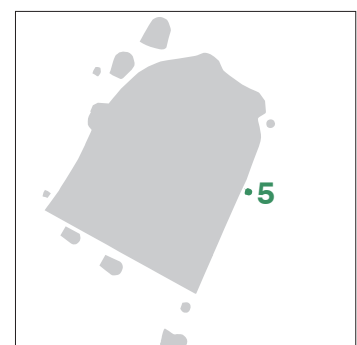
Fences required to manage these sites have been installed and are repaired as necessary, however, construction methods that do not affect the archaeological features are selected, with due consideration for the landscape.



Component part 5: Tsukamawari Kofun

Tsukamawari Kofun is a round kofun located on the eastern side of Nintoku-tenno-ryo Kofun and is managed by the Sakai City Government as a Historic Site.

The mound remains in good condition. Archaeological remains and artifacts are well preserved underground. Excavations have confirmed a burial chamber and a row of *haniwa* sculptures.



Tall trees are found on the mound. It is anticipated that fallen trees would affect

the site, therefore regular patrols to identify and fell decayed and withered trees are conducted to prevent any damage to the archaeological features.

Facilities required for site management such as fences, a signpost and an interpretation board to communicate the value as a Historic Site to visitors have been installed, and their repairs are undertaken as necessary for site management functions. However, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 6: Osamezuka Kofun

Osamezuka Kofun is a scallop-shaped kofun located inside an urban park (Daisen Park) near the southeast edge of Nintoku-tenno-ryo Kofun. The round rear section is managed as a Historic Site by the Sakai City Government. The square front section of the mound has undergone some alterations, but the round rear section remains in good condition. The archaeological features and artifacts are well preserved underground, and excavations have identified a row of *haniwa* sculptures and paving stones near the terrace.

On the mound are tall trees and thriving bamboo grasses. It is anticipated that fallen trees would affect the site, therefore, regular patrols to identify and fell decayed and withered trees are conducted to prevent any damage to the archaeological features.

Facilities such as fences, a signpost and an interpretation board to communicate the value as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, construction methods that do not affect the archaeological features are selected, with due consideration for the landscape.

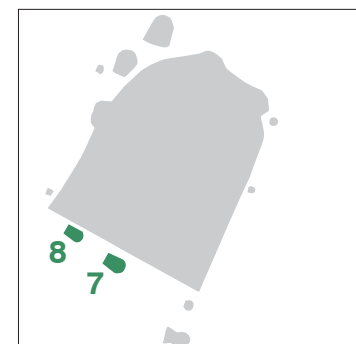
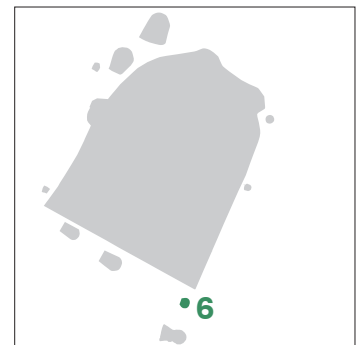
Some concrete structures for installing the fences are in place at the site, but the act of putting them in did not affect the site. They are planned to be removed in the future.

Component part 7: Magodayuyama Kofun

Component part 8: Tatsusayama Kofun

Both of the mounded tombs are scallop-shaped kofun in Daisen Park, located to the south of Nintoku-tenno-ryo Kofun. The mounds are managed as *Ryobo* by the Imperial Household Agency and the moats are managed as a Historic Site by the Sakai City Government. Subject to strict management, entry into these sites is prohibited.

The upper part of the square front section of Magodayuyama Kofun has undergone some alterations, but the round rear section remains in good



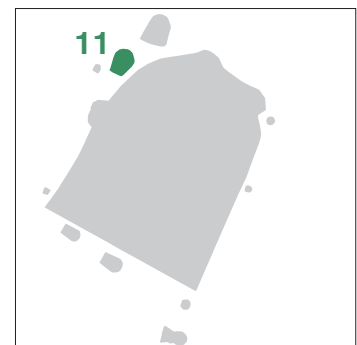
condition. The mound of Tatsusayama Kofun remains in very good condition as well.

The present moats of both tombs have been reconstructed after the original moats were covered by a layer of earth when Daisen Park was created. The moats of these tombs are filled with water, however, there have been no impacts on archaeological features due to the implementation of protective measures against erosion such as an embankment.

Trees on the mounds are expected to have some impact on the site, therefore, decaying trees are identified via regular patrols and are felled to prevent any damage to the archaeological features. No new trees are to be planted.

Component part 11: Maruhoyama Kofun

Maruhoyama Kofun is a scallop-shaped kofun located on the western side of the round rear section of Nintoku-tenno-ryo Kofun. The round section of the mound is managed by the Imperial Household Agency as both a *Ryobo* and Historic Site, and the square front section of the mound and moat are managed by the Sakai City Government as a Historic Site. Partial erosion at the foot of the mound caused by moat water has been identified, and the upper part of the square section of the mound has undergone some alteration during housing construction in the 1950s. Nevertheless, entry to the property is prohibited, and the state of conservation of the round section is good.



Trees on the mounds are expected to have some impact on the site, therefore, decaying trees are identified via regular patrols and are felled to prevent any damage to the archaeological features.

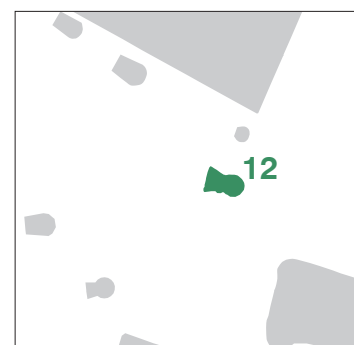
Facilities required for site management such as fences, a signpost and an interpretation board to communicate the value as a Historic Site to visitors have been installed, and repairs are undertaken as necessary for site management functions. However, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

At the square front section of the mound, some foundations, plumbing arrangements and a concrete-framed well were installed for the construction of residences, however, they are planned to be removed in the future.

Component part 12: Nagatsuka Kofun

Nagatsuka Kofun is a keyhole-shaped kofun located in the southeast of Nintoku-tenno-ryo Kofun and is managed by the Sakai City Government as a Historic Site.

Only the mound can be seen at ground level and a fence has been installed



to prevent the public from entering the mound. The mound remains in good condition. The archaeological features and artifacts are preserved in good condition underground, and the existence of a burial facility has been identified by a radar survey.

Tall trees are found on the mound. It is anticipated that fallen trees would affect the site, therefore regular patrols to identify and fell decayed and withered trees are conducted to prevent any damage to the archaeological features.

Facilities such as fences, a signpost and an interpretation board to communicate the value of the site as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Some concrete structures that were installed for subdividing land are still found at the site, but their installation did not impact the mound and other archaeological features. They are planned to be removed in the future.

Component part 13: Hatazuka Kofun

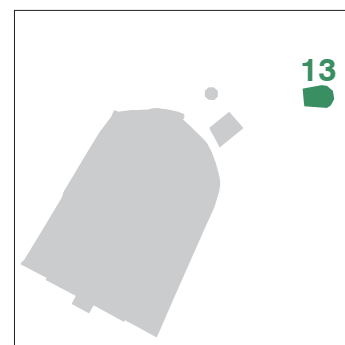
Hatazuka Kofun is a scallop-shaped kofun within an urban park (Daisen Park) located to the south of Nintoku-tenno-ryo Kofun and is managed by the Sakai City Government as a Historic Site. A part of the mound has been altered, but the rest of the mound remains in good condition. The archaeological features and artifacts have been well preserved underground, and excavations have identified a row of *haniwa* sculptures and stones near the terrace.

The moat has been converted into a water and swamp garden, and the foot of the mound has been improved with cobbled stones. Part of the moat is filled with water, but this does not affect the mound.

Trees on the mound are under regular observation as an experimental garden for urban forestry. The trees are densely grown and are expected to have an impact on the site. Decayed and withered trees are identified by regular patrols and removed to avoid damage to the site.

Facilities such as a signpost have been installed for site management purposes. When repairing them, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Garden paths and concrete blocks were installed when the park was established, but they need to be removed.



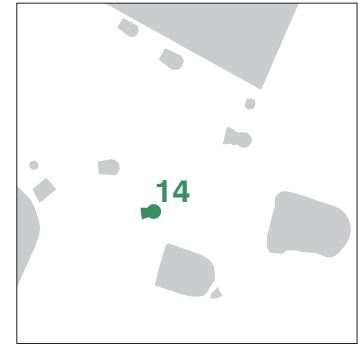
Component part 14: Zenizuka Kofun

Zenizuka Kofun is a scallop-shaped kofun located within the premises of the Osaka Prefectural Sakai Support School and is managed as a Historic Site by the Osaka Prefectural Government.

The upper part of the round section, as well as the square section, have undergone alterations, nevertheless, the mound remains generally in good condition. The archaeological features and artifacts have been well preserved underground. Excavations have identified paving stones and *haniwa* sculptures near the terrace at the round section.

As for trees on the mound, dead and withered ones are identified by regular patrols and removed to prevent any damage to the archaeological features from falling trees.

At the site, a retaining wall to demonstrate the original extent of the mound, which was delineated following excavations, and an interpretation board to inform visitors of its value as a Historic Site have been installed. When undertaking repairs, construction methods that do not affect the archaeological features are selected, with due consideration for the landscape.



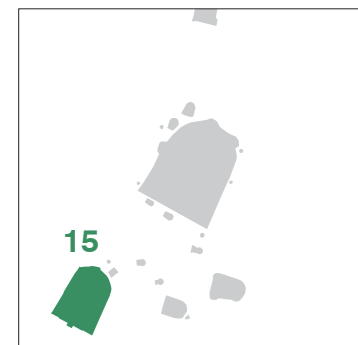
Component part 15: Richu-tenno-ryo Kofun

Richu-tenno-ryo Kofun is a keyhole-shaped kofun located in the southwestern part of the Mozu area and is managed by the Imperial Household Agency as a *Ryobo*. Apart from the worship area comprising the place of worship and its approaching path, entry into the mound is essentially prohibited. The site is subject to strict management with no possibility of any human-induced impacts. Some erosion along the mound foot is observed, but the mound and the moat remain in good condition.

The moat is filled with water and protective measures are implemented by temporarily lowering the water level in order to prevent any damage to the site.

As for the trees on the mound, dead and withered trees are identified by regular patrols and removed to avoid damage to the archaeological features from falling trees, and the trees are also systematically thinned. Trees on the bank and at the worship place are regularly maintained and chemically sprayed.

Within the site, facilities for worship such as a *torii* gate, lanterns, a gate and a stone fence have been installed, along with fences and a guardhouse necessary for the management of the site, as well as channels and spillways to regulate the moat. When undertaking repairs to maintain management and ritual functions of the site, a construction method that does not affect the



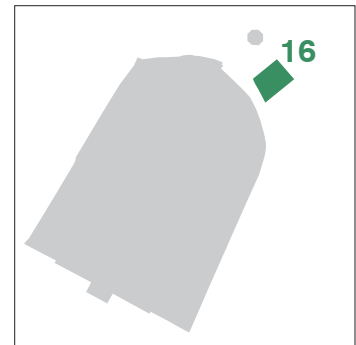
archaeological features is selected, with due consideration for the landscape.

Component part 16: Terayama-minamiyama Kofun

Terayama-minamiyama Kofun is located in the northeast of Richu-tenno-ryo Kofun and is managed as a Historic Site by the Sakai City Government. The upper part of the mound was altered as a result of residential construction around 1961, however, the mound remains generally in good condition. The archaeological features and artifacts have been well preserved underground. Excavations have identified a row of *haniwa* sculptures and paving stones in the terraced area.

As for trees on the mound, dead and withered ones are identified by regular patrols and removed to prevent any damage to the archaeological features from falling trees.

At the site, there are fences and brick walls used for residence construction, but they are planned to be removed in the future.

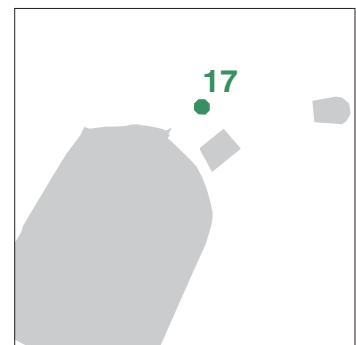


Component part 17: Shichikannon Kofun

Shichikannon Kofun is a round kofun located on the northeast side of Richu-tenno-ryo Kofun and is managed as a Historic Site by the Sakai City Government. When the urban park (Daisen Park) was established, and prior to the designation of Shichikannon Kofun as a Historic Site, a layer of earth was placed over the mound to protect it. Excavations have confirmed that there is indeed a covering soil layer, under which the mound is protected in good condition.

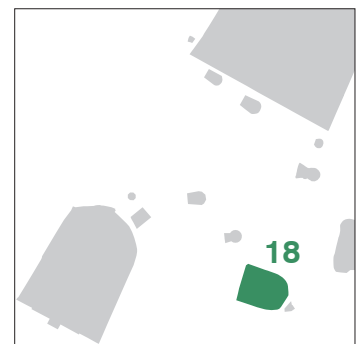
As for the vegetation on the mound, azaleas planted during the creation of the urban park and bamboo trees have spread across the area, however, the protective layer of covering soil prevents damage to the property.

Facilities for site management, such as a signpost and an interpretation board to communicate the value of the site as a Historic Site, have been installed at this site. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.



Component part 18: Itasuke Kofun

Itasuke Kofun is a keyhole-shaped kofun located in the center of the Mozu area and is managed as a Historic Site by the Sakai City Government. The moat is filled with water, and erosion along the foot of the mound has been identified. A fence has been installed to prevent the public from entering into the mound. The mound and the moat remain in good condition.



As for the vegetation on the mound, some trees growing around the edge of the mound are leaning and bamboo thickets have fallen. Trees posing a risk to the site are felled to prevent any damage to the archaeological features.

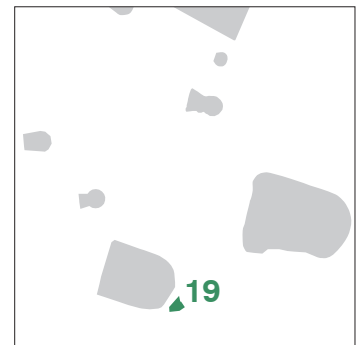
Necessary facilities such as fences, a signpost and an interpretation board to communicate the value of the site as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

The concrete bridge left in the moat is remaining from a development project that once threatened demolition of the site. The project was successfully stopped by a citizen's movement and the site was designated as a Historic Site.

Component part 19: Zenemonyama Kofun

Zenemonyama Kofun is a square kofun located in the southeast area of Itasuke Kofun and is managed as a Historic Site by a private owner. It is preserved as a green space within a nursing home on private land.

The upper section of the mound has undergone some alterations; nevertheless, the mound generally remains in good condition. The archaeological features and artifacts have been well preserved underground. Excavations have identified a row of *haniwa* and paving stones close to the terraced section.

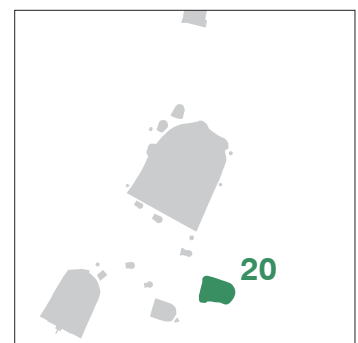


As for trees on the mound, dead and withered ones are identified by regular patrols and removed to prevent any damage to the archaeological features from falling trees.

Facilities required for the management of the site, such as fences, a signpost and an interpretation board to communicate the value of the site as a Historic Site to visitors, have been installed. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 20: Gobyoyama Kofun

Gobyoyama Kofun is a keyhole-shaped kofun located in the center of the Mozu area and is managed by the Imperial Household Agency as a *Ryobo*, while the moat is managed by the Sakai City Government and private owners. Currently, entry into the site is essentially prohibited; therefore, there is no possibility of human-induced impact on the mound.



Some erosion along the foot of the mound was identified in the past, but further erosion has been prevented due to the construction of an embankment

in 2009. Aside from the foot of the mound, the moat remains in good condition.

As for the trees on the mound, dead and withered trees are identified by regular patrols and removed to avoid damage to the archaeological features from falling trees, and trees are also systematically thinned. No new trees are to be planted.

Component part 21: Nisanzai Kofun

Nisanzai Kofun is a keyhole-shaped kofun located in the southeastern edge of the Mozu area and managed as a *Ryobo* by the Imperial Household Agency, while the moat is managed by the Sakai City Government. Currently, entry into the site is essentially prohibited, therefore, there is no possibility of human-induced impact on the mound.

Some erosion along the foot of the mound was identified in the past, but further erosion has been prevented due to embankment work implemented from 2014 to 2016. Aside from the foot of the mound, the mound and the moat remain in good condition.

As for the trees on the mound, dead and withered trees are identified and removed by regular patrols to avoid damage to the archaeological features from falling trees, and trees are also systematically thinned. No new trees are to be planted.

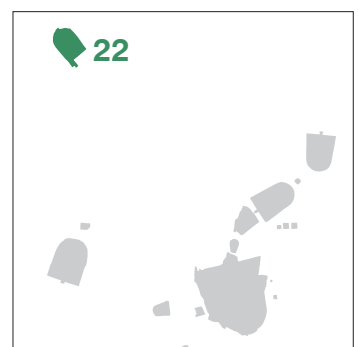
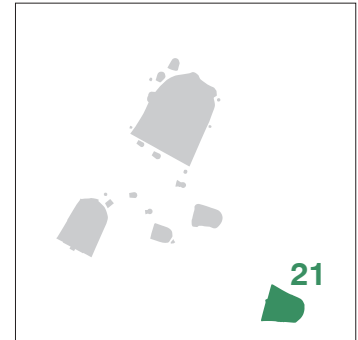
Fences required to manage these sites have been installed. When repairing them, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 22: Tsudo-shiroyama Kofun

Tsudo-shiroyama Kofun is a keyhole-shaped kofun located on the northern edge of the Furuichi area. The mound, inner moat and inner bank are managed as a Historic Site by the Fujiidera City Government and private owners, while part of the mound is managed as a *Ryobo* by the Imperial Household Agency.

The site was converted into a fortress compound in the Middle Ages, during which the shape of the mound was altered. The moat was partially reclaimed for the development of paddy fields in the Edo period, however, the mound and moat remain in good condition. The burial facility was discovered from the top of the round section of the mound in 1912. In addition, excavations identified that the archaeological features and artifacts were preserved in good condition underground.

The mound was originally surrounded by a moat, but the moat was later filled in. Plantings now show the location and extent of the moat that is currently



preserved underground.

As for trees on the mound, dead and withered ones are identified by regular patrols and removed to prevent any damage to the archaeological features from falling trees.

Facilities such as fences, a signpost and an interpretation board to communicate the value of the site as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 23: Chuai-tenno-ryo Kofun

Chuai-tenno-ryo Kofun is a keyhole-shaped kofun located on the western edge of the Furuichi area and is managed as a *Ryobo* by the Imperial Household Agency. Apart from the worship area comprising the place of worship and its approaching path, entry into the mound is essentially prohibited.

The kofun was converted into a fortress compound and underwent some alterations in the medieval period. Some erosion along the foot of the mound has been identified in the past, but further erosion has been prevented due to embankment work carried out in 1997. Aside from the foot of the mound, the mound and the moat remain in good condition.

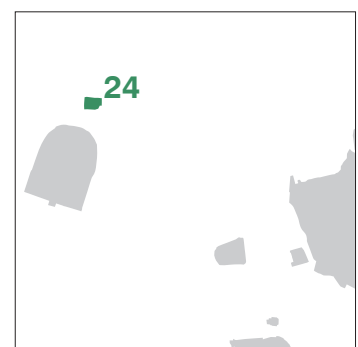
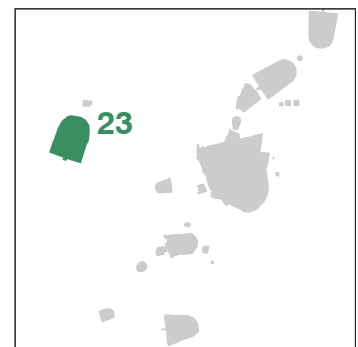
Although the moat is filled with water, there are currently no impacts on the archaeological features thanks to the embankment.

As for the trees on the mound, dead and withered trees are identified by regular patrols and removed to avoid damage to the archaeological features from falling trees, and trees are also systematically thinned. Trees on the bank and at the place of worship are regularly maintained and chemically sprayed.

Facilities for worship such as a *torii* gate, lanterns, a stone fence and a gate have been installed, along with fences and a guardhouse necessary for the management of the site, as well as channels and spillways to regulate the moat. Repairs of such facilities are implemented as required to maintain ritual and management functions at the site, however, construction methods that do not affect the archaeological features are selected, with due consideration for the landscape.

Component part 24: Hachizuka Kofun

Hachizuka Kofun is a keyhole-shaped kofun located to the north of Chuai-tenno-ryo Kofun and is managed as a Historic Site by the Fujiidera City Government and a private owner. Residential construction was conducted



on a section of the buried moat in 1965, followed by the construction of the Fujiidera City West Kindergarten in 1970. The moat is preserved underground and the mound remains in good condition.

As for trees on the mound, dead and withered ones are identified by regular patrols and removed to prevent any damage to the archaeological features from falling trees.

Facilities such as fences, a signpost and interpretation board to communicate the value of the site as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 25: Ingyo-tenno-ryo Kofun

Ingyo-tenno-ryo Kofun is a keyhole-shaped kofun located in the northeastern part of the Furuichi area and is managed as a *Ryobo* by the Imperial Household Agency. Aside from the worship area comprising the place of worship and its approaching path, entry into the site is essentially prohibited and is subject to strict management. There is no possibility of human-induced impact on the mound. The mound and the moat remain in good condition.

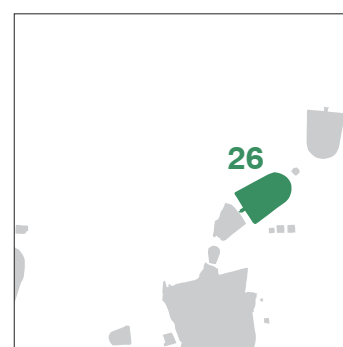
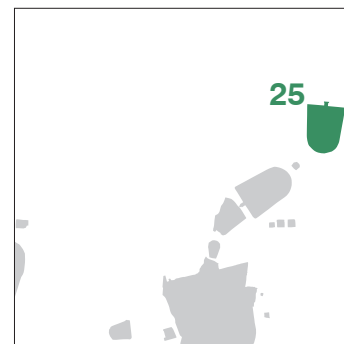
There is a small amount of water in a section of the moat, which has no impact on the mound.

As for the trees on the mound, dead and withered trees are identified by regular patrols and removed to avoid damage to the archaeological features from falling trees, and trees are also systematically thinned. Trees on the bank and at the place of worship are regularly maintained and chemically sprayed.

Within the site, facilities have been installed for worship, such as a *torii* gate, lanterns, a stone fence and a gate, along with fences and a guardhouse necessary for the management of the site, as well as channels and spillways to regulate the moat. Repairs of such facilities are implemented as required to maintain ritual and management functions at the site, however, construction methods that do not affect the archaeological features are selected, with due consideration for the landscape.

Component part 26: Nakatsuhime-no-mikoto-ryo Kofun

Nakatsuhime-no-mikoto-ryo Kofun is a keyhole-shaped kofun located at the highest altitude in the Furuichi area and is managed as a *Ryobo* by the Imperial Household Agency. Apart from the worship area comprising the place of worship and its approaching path, entry into the site is essentially prohibited and is subject to strict management. There is no possibility of human-induced



impact on the mound. The mound and the moat remain in good condition.

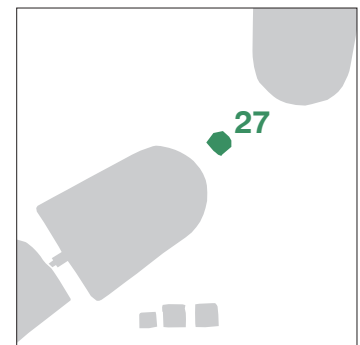
There is a small amount of water in a section of the moat, which has no impact on the mound.

As for the trees on the mound, dead and withered trees are identified by regular patrols and removed to avoid damage to the archaeological features from falling trees, and trees are systematically thinned. Trees on the bank and at the place of worship are regularly maintained and chemically sprayed.

Within the site, facilities have been installed for worship such as a *torii* gate, lanterns, a stone fence and a gate, along with fences and a guardhouse necessary for site management, as well as channels and spillways to regulate the moat. Repairs of such facilities are implemented as required to maintain ritual and management functions at the site, and construction methods that do not affect the archaeological features are selected, with due consideration for the landscape.

Component part 27: Nabezuka Kofun

Nabezuka Kofun is a square kofun located to the northeast of the round rear section of Nakatsuhime-no-mikoto-ryo Kofun and is managed as a Historic Site by the Fujiidera City Government. Trees on the mound have grown tall and some surface ran-off were identified around the mound. To address this, in 2012, some protective measures were conducted, including felling trees and laying down additional layers of earth and plant sod to protect the mound. The mound remains in good condition.

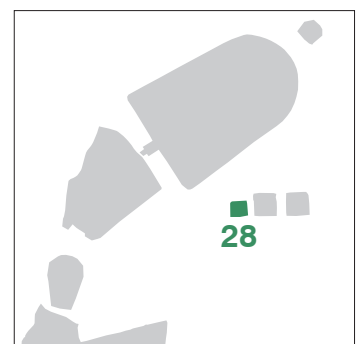


As for the vegetation on the mound, its maintenance is ensured by the protective measures carried out, and it has no impact on the archaeological features.

Facilities such as fences, a signpost, stairs and an interpretation board to communicate the value of the site as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 28: Suketayama Kofun

Suketayama Kofun is a square kofun located to the south of Nakatsuhime-no-mikoto-ryo Kofun and is managed as a Historic Site by the Fujiidera City Government. The megalith used as the burial facility is exposed at the top of the mound and some surface ran-off were identified around the mound. For this reason, in 2012, some trees were felled and additional layers of earth and plant sod were laid down as protective measures. The mound remains in good



condition.

As for the vegetation on the mound, its maintenance is ensured by the protective measures conducted.

Facilities such as fences, a signpost, stairs and interpretation board to communicate the value of the site as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 29: Nakayamazuka Kofun

Component part 30: Yashimazuka Kofun

Nakayamazuka Kofun and Yashimazuka Kofun are located to the south of Nakatsuhime-no-mikoto-ryo Kofun and managed as *Ryobo* by the Imperial Household Agency. Entry is essentially prohibited and the sites are subject to strict management, therefore, there is no possibility of human-induced impact on the mounds. The mounds remains in good condition.

As for trees on the mounds, dead and withered ones are identified by regular patrols and removed to prevent damage to the archaeological features from falling trees. In principle, no new trees are to be planted.

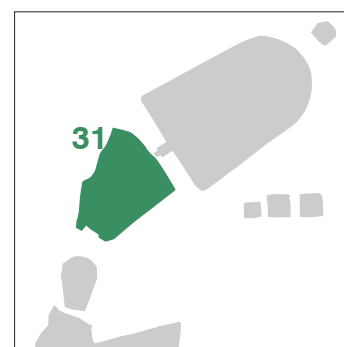
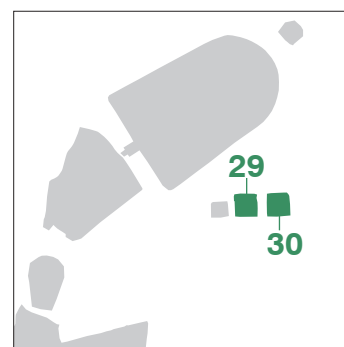
Fences required to manage these sites have been installed. When repairing them, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 31: Komuroyama Kofun

Komuroyama Kofun is a keyhole-shaped kofun located to the south of Nakatsuhime-no-mikoto-ryo Kofun and managed as a Historic Site by the Fujiidera City Government and a private owner. A section of the mound was altered as a result of residential construction in 1965, however, the mound is completely preserved and the moat is preserved underground. Thus, the mound and the moat remain in good condition.

Most of the trees on the mound are cherry and plum planted in the 1970s, with some persimmon trees remaining from the time when the area was used as an orchard. The effects of sawtooth oaks planted before World War II for firewood and charcoal are visible on the archaeological features, hence felling and pruning take place as required.

Facilities such as fences, a signpost and an interpretation board to communicate the value of the site as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, a construction method that does not affect the archaeological features is



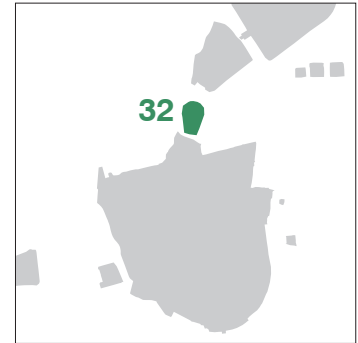
selected, with due consideration for the landscape.

Component part 32: Otorizuka Kofun

Otorizuka Kofun is a keyhole-shaped kofun located in the north of Ojin-tenno-ryo Kofun and managed as a Historic Site by the Fujiidera City Government. The round rear section of the mound has some holes where an anti-aircraft gun was likely positioned and digging works likely used to hide aircraft during World War II. Despite this, the mound is almost completely intact. The moat is preserved underground and the mound remains generally in good condition.

On the mound are sawtooth oaks planted before World War II for firewood and charcoal. Their growth impedes that of the undergrowth, and promotes surface runoff that subsequently impacts the archaeological features. Hence, felling and pruning take place as required.

Facilities such as fences, a signpost and interpretation board to communicate the value of the site as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.



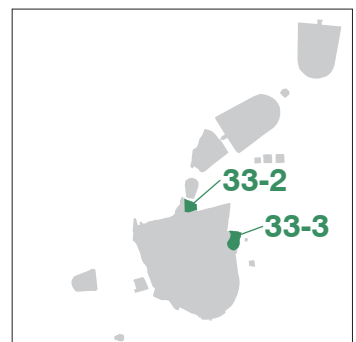
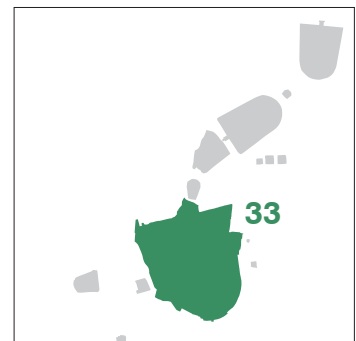
Component part 33: Ojin-tenno-ryo Kofun, Konda-maruyama Kofun and Futatsuzuka Kofun

Ojin-tenno-ryo Kofun is a keyhole-shaped kofun located in the center of the Furuichi area, and the mound, inner moat and inner bank are managed as a *Ryobo* by the Imperial Household Agency. Excluding the place of worship and its approaching path, entry into the site is prohibited and the site is subject to strict management, therefore, there is little possibility for any human impacts on the mound. The mound and inner moat remain in good condition.

Furthermore, parts of the outer moat and the outer bank are managed as a Historic Site by the Habikino City Government and private owners. Some parts are used as an orchard. Excavation has identified a row of *haniwa* sculptures and paving stones, and the archaeological features and artifacts underground are preserved in good condition. The outer moat and bank remain in good condition.

The inner moat is filled with water and currently has no effect on the mound. The western part of the moat has been filled in by sediment, but this has no effect on the archaeological features.

As for the trees at Ojin-tenno-ryo Kofun, dead and withered trees are identified by regular patrols and removed to avoid damage to the archaeological features from falling trees, and trees are also systematic thinned. Trees on the inner bank and at the place of worship are regularly maintained and chemically



sprayed.

The outer moat bank includes cherry and fig orchards and flowering plants, however, the depths of digging required for their maintenance and harvesting are shallow and have no impact on the archaeological features.

Within the site, facilities for worship have been installed, including a *torii* gate, lanterns, a stone fence and a gate, along with fences and a guardhouse necessary for the management of the site, as well as channels and spillways to regulate the moat. Repairs of such facilities are implemented as required to maintain ritual and management functions at the site, however, construction methods that do not affect the archaeological features are selected, with due consideration for the landscape.

As concerns Konda-maruyama Kofun, a round kofun, and Futatsuzuka Kofun, a keyhole-shaped kofun, located within Ojin-tenno-ryo Kofun, any dead and withered trees on the mounds are identified by regular patrols and removed. As entry into the mounds is prohibited and strict management is conducted, the state of conservation is good.

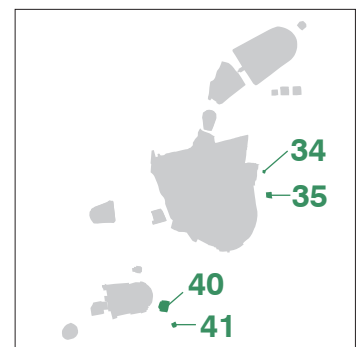
Component part 34: Higashiumazuka Kofun

Component part 35: Kurizuka Kofun

Component part 40: Mukohakayama Kofun

Component part 41: Nishiumazuka Kofun

These four mounded tombs are square kofun located to the east and south of Ojin-tenno-ryo Kofun and are managed as *Ryobo* by the Imperial Household Agency. They are subject to strict management with entry essentially prohibited. All the mounds remain in good condition.

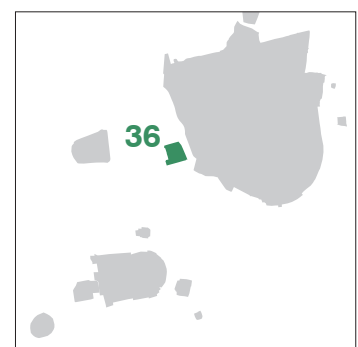


Trees growing on top of the mounds are expected to have some impacts on the sites, however, decayed trees are identified and felled via regular patrols. Dangerous trees posing a risk to neighboring residences are also removed and inspections to identify such trees are ongoing. No new trees are to be planted.

Fences required to manage these sites have been installed. When repairing them, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 36: Higashiyama Kofun

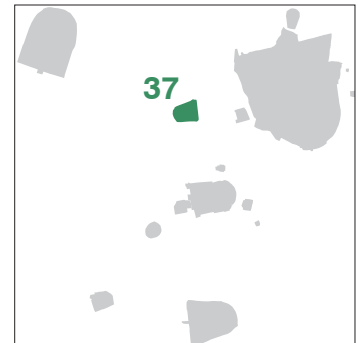
Higashiyama Kofun is a square kofun located to the west of Ojin-tenno-ryo Kofun and is managed as a Historic Site by a private owner. Excavation has identified a row of cylindrical *haniwa*, the state of conservation of the mound is good and the moat is also preserved underground.



Tall trees are found on the mound. It is anticipated that fallen trees would affect the site, but regular patrols to identify decayed and withered trees are conducted to prevent any damage to the archaeological features.

Component part 37: Hazamiyama Kofun

Hazamiyama Kofun is a keyhole-shaped kofun located in the center of the Furuichi area and is managed as a Historic Site by the Fujiidera City Government and a private owner. Although the mound has been partially altered through soil removal, it is completely preserved. Some parts of the moat were reclaimed due to the development of paddy fields, but the archaeological features are preserved underground. Thus, the mound and the moat remain in good condition.



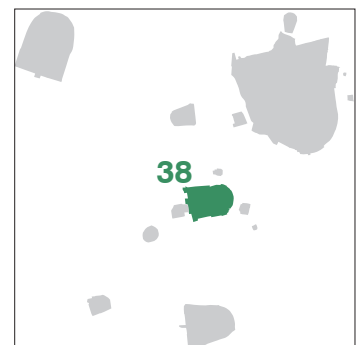
On the mound are sawtooth oaks planted before World War II for firewood and charcoal. Their growth impedes that of the undergrowth, which impacts the archaeological features through surface runoff. Hence, felling and pruning take place as required.

The moat is filled with water, except for one part at the round rear section of the mound. The installation of gabion baskets is being considered to prevent erosion identified at the foot of the mound.

Facilities such as fences, a signpost and an interpretation board to communicate the value of the site as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 38: Hakayama Kofun

Hakayama Kofun is a keyhole-shaped kofun located in the center of the Furuichi area, and the mound is classified as both a *Ryobo* and a Historic Site by the Imperial Household Agency. Entry into the mound is prohibited; therefore, there is no possibility of human-induced impact on the mound. The mound remains in good condition.



The moat and the bank are managed as a Historic Site by the Habikino and Fujiidera City Governments and a private owner. Part of the moat was subject to land reclamation for a graveyard in 1967. The archaeological features are preserved underground, and the moat remains in good condition.

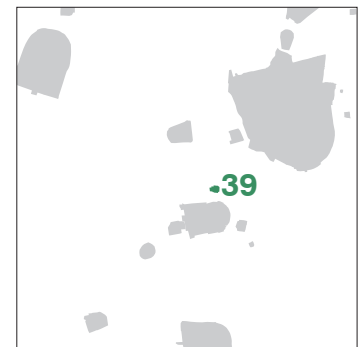
The moat is filled with water and currently some erosion is identified at the foot of the mound. A part of the moat has been filled in by sediment, but this has no effect on the archaeological features.

As for the trees on the mound, dead and withered trees are identified by regular patrols and removed to avoid damage to the archaeological features from falling trees, and trees undergo systematically thinning.

Facilities such as fences, a signpost and an interpretation board to communicate the value of the site as a Historic Site to visitors have been installed for site management purposes. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 39: Nonaka Kofun

Nonaka Kofun is a square kofun located in the north of Hakayama Kofun and managed as a Historic Site by the Fujiidera City Government and a private owner. The mound has been partially altered due to the usage of its mounded earth for the construction of residences in the surrounding area in the 1930s, however, the mound remains generally in good condition. Excavations conducted in 1964 identified a great number of armors and iron weapons, and a moat was found in later excavations. Archaeological features and artifacts are well preserved underground.

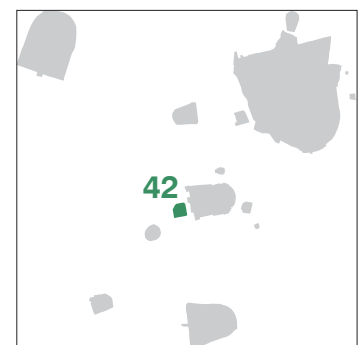


The mound is entirely covered by grass with trees in some parts. Grass is mowed as required to avoid the negative impact on the property.

Facilities required for site management such as fences and an interpretation board to communicate the value of the site as a Historic Site to visitors have been installed. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

Component part 42: Joganjiyama Kofun

Joganjiyama Kofun is a square kofun located to the west of Hakayama Kofun and is managed as a Historic Site by the Fujiidera City Government and a private owner. Part of the mound has been altered by a road used since the Edo period, but the mound remains in good condition. Excavations have identified paving stones, and the archaeological features and artifacts are well preserved underground.



As for trees on the mound, dead and withered ones are identified by regular patrols and removed to prevent any damage to the archaeological features from falling trees.

Facilities required for site management such as fences and an interpretation board to communicate the value of the site as a Historic Site to visitors have been installed. When undertaking repairs, a construction method that does not

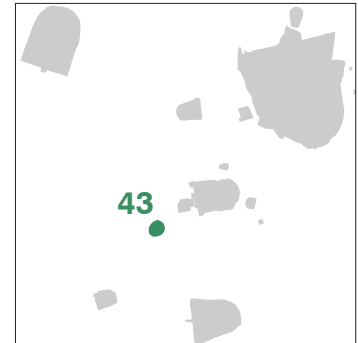
affect the archaeological features is selected, with due consideration for the landscape.

Component part 43: Aoyama Kofun

Aoyama Kofun is a round kofun located to the west of Hakayama Kofun and managed as a Historic Site by the Fujiidera City Government and a private owner. The moat is filled with water, but there is no evidence of the water affecting the mound. The mound and the moat remain in good condition. The moat water used to be utilized for irrigation, thus water rights are still held over the moat. However, it is currently not utilized as such.

As for trees on the mound, dead and withered ones are identified by regular patrols and removed to prevent any damage to the archaeological features from falling trees.

Fences required to manage these sites have been installed. When repairing them, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.

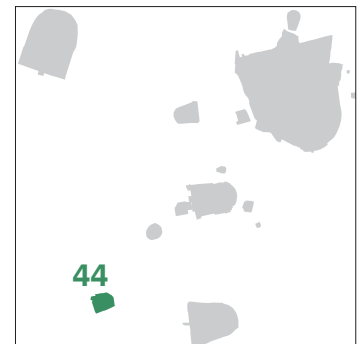


Component part 44: Minegazuka Kofun

Minegazuka Kofun is a keyhole-shaped kofun within Minezuka Park, located in the southwestern part of the Furuichi area and managed as a Historic Site by the Habikino City Government. The moat is filled with water and some erosion along the foot of the mound has been identified, but the mound and the moat remain generally in good condition. Excavations have identified a burial facility and a buried moat.

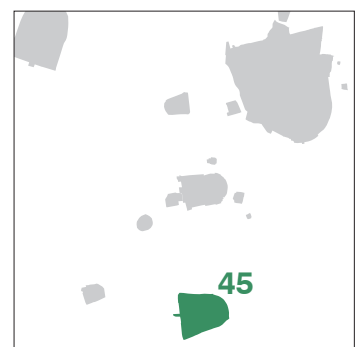
As for trees on the mound, dead and withered ones are identified by regular patrols and removed to prevent any damage to the archaeological features from falling trees.

Facilities required for the management of the site, such as fences, a sluice gate, and an interpretation board to communicate the value of the site as a Historic Site to visitors have been installed. When undertaking repairs, a construction method that does not affect the archaeological features is selected, with due consideration for the landscape.



Component part 45: Hakuchoryo Kofun

Hakuchoryo Kofun is a keyhole-shaped kofun located in the southern part of the Furuichi area and managed as a *Ryobo* by the Imperial Household Agency. The site is subject to strict management with entry essentially prohibited, excluding the worship area comprising the place of worship and its approaching path. There is no possibility of human-induced impact on the mound. Erosion at the foot of the mound was identified in the past, yet further



erosion has been prevented due to the construction of an embankment from 2002 to 2003. Aside from the foot of the mound, the moat remains in good condition.

The moat is filled with water, however, there is currently no impact on the archaeological features thanks to the embankment.

As for the trees on the mound, dead and withered trees are identified by regular patrols and removed to avoid damage to the archaeological features from falling trees, and trees are systematically thinned. Trees on the bank and at the place of worship are regularly maintained and chemically sprayed.

Within the site, facilities have been installed for worship, such as a *torii* gate, lanterns, a stone fence and a gate, along with fences and a guardhouse necessary for the management of the site, as well as channels and spillways to regulate the moat. Repairs and reconstruction of such facilities are implemented as required to maintain ritual and management functions at the site, and the construction methods selected ensure the preservation of the archaeological features, with due consideration for the landscape.

4.b Factors Affecting the Property

Currently, the state of conservation for the individual component parts is favorable. Factors which are likely to affect or threaten the property in the future, such as development pressures, environmental changes, natural disasters and their impact are forecasted, thereby systematically handled.

(i) Development pressures

After World War II, some kofun were lost due to postwar rebuilding and development, revolving around residential land development and sand-and-earth gathering projects, which accompanied the population increase in urban areas. However, the protection of kofun against development pressures steadily advanced in response to a surging kofun protection campaign initiated by local citizens, and the development of legal protections for cultural properties (enforcement of the Law for the Protection of Cultural Properties in 1950).

Under the Law for the Protection of Cultural Properties, the management is appropriately conducted by the owners, and alteration of the existing state of the component parts that are designated as Historic Sites is strictly restricted.

The component parts that are not designated as Historic Sites are directly managed as *Ryobo* by the national government and, equally, any alteration of their existing state is strictly restricted. Therefore, there is no chance for development activities to take place on the property.

Within the buffer zone, no large-scale development is planned at this point. Renewal of public facilities, commercial facilities and residences, which could potentially affect the property, is properly managed by regulating the building height, form and design in accordance with legislations such as the City Planning Act and the Landscape Act. While the property is located in an urban environment and enhancement of urban infrastructure would be expected to impact the property, all large-scale projects on urban infrastructure have already been completed. Small-scale enhancements of sewerage and roads are foreseen, but shall be controlled to mitigate any negative impacts on the property.

(ii) Environmental pressures

Currently, no environmental changes that could possibly affect the property and the buffer zone have been recognized, however, issues concerning

climate change, trees and wildlife may have some potential impact. For this reason, through regular monitoring of the property, potential impacts to the Outstanding Universal Value of the property shall be assessed at an early stage, and appropriate measures to prevent damage shall be taken.

a) Climate change

In recent years, extreme weather caused by global warming has frequently brought heavy rains to the area. In this regard, flooding could have an impact on the mounds and the archaeological features underground.

b) Trees

As the mounds of the component parts are covered with trees, and the overgrowth of trees due to climate change can hamper the growth of underbrush, thereby exposing the mound surface. Thus, some surface run-off from the mounds caused by rainwater is anticipated and will potentially impact the archaeological features underground.

c) Wildlife

As lush environments generally predominate at kofun, raccoon dogs, crows, herons, ducks and other wildlife have been confirmed to inhabit some of the mounds. The nesting of raccoon dogs, in particular, may cause damage to the mounds. Damage from bird droppings can lead to the whitening and withering of trees, and eventually their falling. This too can negatively impact the buried archaeological features.

(iii) Natural disasters and risk preparedness

In terms of natural disasters that could affect the property, storms, floods, earthquakes and fires can be expected. The prefectural and municipal governments have established regional disaster prevention plans against natural disasters, which promote disaster prevention awareness and set forth measures for specific emergency responses in the event of a natural disaster.

a) Storms and floods

Fallen trees caused by typhoons may have a negative impact on the archaeological features buried underground. Moreover, heavy rains may cause the mounds to collapse, or raise the moat water level rapidly, which can erode the foot of the mounds. After typhoons and heavy rainfall, additional patrols and inspections shall be carried out to monitor the sites. When abnormalities are identified, emergency measures shall be taken to prevent further damage.

b) Earthquakes

It is possible for the mounds to collapse if a major earthquake hits this area in the future². Patrols and inspections shall be conducted after earthquakes.

2. Archaeological earthquake studies indicate the high probability that the past collapse of the mounds was not only caused by human-induced alterations but a huge earthquake. The Konda Fault running north to south developed in the area where the Furuichi area and the terrace surface have been displaced. The northwestern edge of the mound of Ojin-tenno-ryo Kofun was constructed on the fault and has largely collapsed. The Settsu/Kawachi Earthquake of 1510 caused extensive damage to this area and is considered likely to have caused the collapse of the Ojin-tenno-ryo Kofun mound. Sangawa, Akira. March 1988. "Kokogaku no kenkyu taisho ni mitomerareru jishin no konseki" [Traces of earthquake found in subject of archaeological research]. *Kodaigaku Kenkyu* [Journal for Ancient Studies], 116 (In Japanese)

In cases where the abnormalities such as the mound collapse are identified, appropriate emergency measures shall be taken to prevent the damage from spreading and avert secondary disasters.

c) Fires

The component parts are all earthen structures and, in most cases, there are trees growing on the mounds. Withered trees are managed and there is little possibility of spontaneous ignition; however, as some properties are next to residential buildings, fires in neighboring houses could spread to the trees on mounds.

(iv) Responsible visitation at World Heritage sites

To deepen understanding of the Outstanding Universal Value and raise public awareness of the property, active promotion and dissemination of information to visitors are important.

A great increase in visitor numbers to the component parts and their surroundings is anticipated once the property becomes inscribed on the World Heritage List. If the number of visitors to the property and the surrounding area dramatically increases following World Heritage inscription, some negative impacts on the property and its surrounding environment could be experienced, such as: damage to the archaeological features caused by visitors passing through; negative impacts on the lives of the surrounding local residents; illegal dumping; and increase of graffiti. In addition, insufficient dissemination of information to visitors and an inadequate visitor reception system could lead to misunderstanding the value of the property and failure to provide visitors a satisfactory experience.

The property is located in a big city and there are tourist attractions such as parks, temples and shrines in the neighborhood of the property, some of which are visited by hundreds of thousands of tourists. However, the current number visiting the Mozu and Furuichi areas for the purpose of viewing the kofun is not high. The number of visitors to the property is predicted to increase after World Heritage inscription, therefore, recording the number of visitors to each component part has been implemented to obtain basic data for handling future carrying capacity.

As for concrete measures for visitor management, the prefectural and municipal governments collaborate in a coherent manner based on the jointly-drafted "Vision for Regional Activation Utilizing the Mozu-Furuichi Kofun Group" (2015), under a common policy applied to both the Mozu and Furuichi areas.

According to this Vision, improvements to encourage responsible visitation include: providing recommended visitor routes for visitor safety and protecting the living environment of the local residents; installing interpretation boards to introduce the component parts and signage for visitors touring the kofun sites; improving facilities for visitor convenience; and providing useful information for visitors.

Moreover, at the sites where people are allowed to climb on the mounds, landscape-friendly stable passageways and stairs shall be installed to ensure proper guidance and to protect the archaeological features from sediment discharge caused by the dramatic increase in visitors.

(v) Number of inhabitants within the property and the buffer zone

Within the property: 6 persons
 Within the buffer zone: 83,291 persons
 Total: 83,297 persons
 Year surveyed: 2016

Table 4-1 Residential populations of the properties and the buffer zones

		Property	Buffer zone		Total
Mozu	Sakai City	0	51,665		51,665
	Habikino City	0	10,316		31,632
Furuichi	Fujiidera City	6	Tsuda-shiroyama Kofun's surroundings	2,717	
			Other areas	18,593	
Total		6	83,291		83,297

(unit: person)

