1. The cooperation between man and nature is necessary for nature to grow. This idea is well understood by communities, which use limited natural resources. Resources on the verge of depletion are called *commons*. Communities governing such resources know that without human intervention, the natural environment becomes hostile and the lack of rules of use leads to disaster. Particular cases of communities governing the commons are: limited irrigation systems in Nepal, meadows/grazing lands in Switzerland’s Alps, limited water reservoirs in southern California or old irrigation systems in Valencia *etc.*

In economic theory examining the management of jointly-used goods -commons- one can find solutions also used in Roman law. This is another testimony to the universality of Roman law, which stems from its rationality. It is not the case when you judge or analyze Roman law using modern economics but rather the other way. Certain solutions adopted by the Roman jurists turn out to be an adequate response also to problems in the modern world.

2. Roman law can be seen in the commons doctrine in two ways. First of all, in the types of goods distinguished within the theory of commons.

3. In the economy there was a longstanding twofold division into private goods and public goods. Two Nobel Prize winners changed that approach. First, Buchanan in 1965 suggested another type – club goods, like theaters, private clubs, toll roads etc. – they are can easily be made exclusive, and belong to certain group, community. Then in 1977, Vincent and Elinor Ostrom proposed a modification of this classification. They added a fourth type of goods - common-pool resources. They are unlike club goods – there is no easy way to make them exclusive since they are crucial for the whole community: like water resource to get fresh water, grazing land to feed their cattle or herd. On the other hand they are unlike public goods since their amount is limited – they have high factor of subtractability – use by one person significantly reduces the amount of good for others.

4. From the point of view of the Roman classification of goods, sensitivity to common goods – to different kinds of shared goods can be seen in the Justinian’s Institutions, and in the texts of Gaius and Marcianus. In addition to private and public goods, the Romans distinguished goods common to all, as well as those that belong to the community. The latter are typical club goods: theaters, stadiums, etc. The former are approaching public goods and the common-pool resources: air, sea, rivers, river banks and sea shores. But the examples and a mere classification are not as much important as the reflection of Roman jurists on rules governing these goods. In the first case – sea shores they reflect two kinds of rules: rules of access and rules of use/management. First is borad – the good is low exclusive; the latter is very specific but quite general: you cannot destroy buildings that others had built there. But is quite interesting, it seems not to be an expression of one of the property rights that are well known for Romans – it is just a factual solution, a precise instruction what kind of action is prohibited.

5. Even more instructive is the case of river banks. When we look at the rules of use we can observe that Roman jurists established more precise and direct indications what one can do on the river banks. You can dry the nets, pull boats, build huts, place cargo. The use is determined in very specific way: it does not approach typical formula of property rights, of property regime, but rather
a high casuistry, and it rather refers to daily life actions, just examples of behavior. Why is it a little bit different than in the case of the seashores? The case of river banks presents the real clash of value between public use and private property or property regime. For river banks belong to the owner of the neighboring land – and it can often be private. However, rules established by jurists prevails the property regime – they are separated from the property regime and are established to protect public use – to protect regardless of the ownership title the goods that are important for the members of the community, and are limited in nature. Jurists indicate actions on the one hand to ensure users about the actions which they can take, and to protect the owners from an abuse or unlawful trespass. The Roman case shows both sensitivity to distinguish different kinds of shared goods in the realm of public goods, and the understanding that there must be some rules of use which are parallel / separate to property regime but help preserve joint-use. Both ideas returned in unprecedented way and unconscious way in the theory of commons: first by modifying the types of goods, secondly by posing the question about the rules of access, and rules of use of those shared-goods which are limited in amount but important for many.

6. The Roman approach towards res communes omnium has however also a direct impact on modern law. Justinian’s Institutions are the direct basis for the American Public Trust Doctrine. In the nineteenth century the US Supreme Court established the Public Trust Doctrine in several landmark cases. Its aim is to protect natural resources - water (rivers, lakes, sea coasts) so that their navigable and commercial character, and now also the recreational one, are maintained. Regardless of the owner of the reservoir or adjacent land, access to such resources is to be free and accessible to all - such good is to be protected and kept for future generations - in trust. In judgments, American courts as the basis for this doctrine recall Justinian’s division of things.

7. The second example of the presence of Roman legal thought in the theory of commons concerns the management of groundwater. Difficulty in limiting access and in preserving the resource for all made it legitimate to ask about the best way of managing the commons and thus lead to the discussion about joint management by the users themselves. In 2009 Elinor Ostrom received Nobel Prize for longtime research that revealed that local communities are able to govern limited natural resources better than public administration or private owners. The founding case for the theory of commons and for the Ostroms research was the groundwater management in California.

8. Groundwater is there a key source of fresh water, but its amount is limited especially in the southern part of the state – so it is an example of the commons. A crowned example of the success of self-organization and self-management of the underground water resource by the users themselves was the case of the Raymond Basin. It is a groundwater basin near Los Angeles which is jointly-used by the cities of Pasadena, Alhambra, and local property owners - individuals and enterprises. In 1930 they realized that has been in overdraft for 20 years and it soon would be depleted. And the users started to cooperate, to find the solution. And they reached the agreement – that everyone will reduce the amount of pumped water in order to preserve the source – but this solution had no legal background or justification in the current case law since in Californian law there were applied water rights of different priority and not all users had equal rights to pump groundwater. One entity opposed this agreement, and that is why we had a case – California's Supreme Court was confronted with the question whether to follow current case law, and water rights or to approve the agreement and find new legal solution. In 1949 the court created the precedent - which reformulated the current legal doctrine regarding groundwater. In this way, local
solution has changed the law, and is still applied in Raymond Basin, and creates the part of the California case law.

9. Groundwater case had influence on both the economic theory of commons and on legal order of California. It promoted more flexible approach towards the groundwater rights, and empowered the local communities to search for factual solutions, rules of use even though they are not inscribed into the law. Roman law appears here in two ways. First till Katz v. Walkinshaw case there was unlimited right of the owner to pump groundwater, and it was based on English law, and through it, on ius commune, and Roman law. In 1903 California Supreme court claimed that right of the owner is correlative - he can pump water rationally and in way, which was beneficial for both the owner and the neighboring owners. In case law there was then applied a tripartite division of groundwater rights – into overlying rights, appropriative rights and prescriptive rights. This tripartite division has been changed by Supreme Court of California in the case of Raymond Basin. In order to save at least a portion of rights to water for all users in the event of a long period of water shortage, the court said that all of them have prescriptive rights, so there was a mutual usucaption of rights to groundwater, there is no priority, but all users are equal.

10. From the point of view of Roman law the most interesting is the distinction between overlying rights and appropriative rights. It was made, among other things, on the basis of the criterion of the permissible way of using the collected water. In the case of overlying rights, the owner may allocate water only to the needs of his land. However, the appropriative user can use it outside his own area: even to export it and sell it – if there is a surplus of water. The application of the criterion of freedom, in the use of the water resource, confirms the universal nature of the Roman legal thought. The clash of views of two jurists, Labeo and Proculus, who lived in different epochs, established two approaches to the use of the water resource. Labeon influenced the Roman legal thought, confirming the legitimacy of the greatest freedom in allocating water from a common resource. It allowed for any use of water, even by making it available to neighbors, and therefore outside the legitimate land. Proculus, in turn, became more rigorous, limiting the permissible use of water only to the ground, which was entitled to the water. Proculus considered the informal joint use of one water pipe right to be unacceptable. He introduced the requirement to closely link the water use to the land, and even only part of the land. Such categorical requirement of water use for a given ground could be a testimony to an attempt to protect the natural good, which is water, before running out.

Today both positions can be seen in the Californian solution. A stronger right to take underground water is vested in the owner for his own needs, and weaker for those who want to use surplus water outside their own territory.

Roman law accepted en tout that the use of the water resource becomes unlawful, if it causes damage to other entitled persons, which today in California law is called the Principle of Correlative Rights.

11. The contemporary changes in economic thought reveal the universal nature of the Roman law, with regard to property. Property was never absolutized or defined in a dogmatic way in the Roman law. That is why Roman jurists where sensitive to different kinds of shared goods and well understood the necessity of establishing the rules of use – very specific and direct ones. They create a set of rights that parallel to property regime. Today theory of commons confirms that approach by introducing four types of goods, and by analyzing bundles of rights that are vested in users regardless of the property regime. In Roman law it was the role of the jurists – noble man that led the community – not of the users themselves like in commons theory. However, the communities analyzed by the Ostroms often displayed a „praetorian” approach, visible in the actions of
communities, who decide on customary solutions, sanctions, the way of monitoring and can change legal rules at least in common law system, and on their territory. There are legal ideas which are rational from the point of view of economics; which are universal for social sciences as such. An exceptional meeting of law and commons not only help discovered the direct influence of Roman law on American common law on groundwater rights, but also opens up a new perspective: legal and economic solutions cannot be measured only by efficiency but also they have to take under consideration whether the solution will allow the community to develop in proper, sustainable way which will preserve both the resources and social bonds and identity.